Application of Repertory Grid Technique to explore perceptions of expertise held by those working within the profession of Conductive Education

Theresa Kinnersley

MSc, BSc, BA, RGN, QCS

A thesis submitted in partial fulfillment of the requirements of the University of Wolverhampton for the degree of Doctor of Philosophy

March 2019

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Signature.....

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0.1. INTRODUCTION TO AND JUSTIFICATION FOR THE GLOSSARY:

Conductive Education (CE), as a "psycho-pedagogic approach" (Sutton, 2002, p. 38) to working with individuals with neuromotor conditions is both similar and uniquely different to other person-centric professions. The motivation for this glossary comes from the findings of Russell (1994) on a research study undertaken by Bairstow, Cochrane and Hur (1993) in which CE is found to be no more effective than other provisions for children with cerebral palsy (Sigafoos, Elkins & Baglioni, 1997). What is of relevance here however is that in the review of the study, Russell (1994) determines that a contributing factor to the findings relates to the poor grasp of CE by the researchers. Elements of CE may appear similar to other professions, however the items included in this glossary aim to help the reader understand the context, and aspects of the detail of practice. In this way it is hoped the reader will be able to grasp an understanding of the 'whole', not just the abstracted parts of CE practice, and so make greater sense of the purpose and findings of this study.

0.1.1. The Conductor:

The conductor, as the professional working within Conductive Education will have achieved both academic recognition; BA (or equivalent) in Conductive Education, and acquired a level of professional competence (Qualified Conductor Status). Conductors working within the UK participating in this study have achieved qualifications from The Petö Institute in Hungary, Keele University, University of Wolverhampton or Birmingham City University.

> The conductor is a motivator, and is trained to always build on the abilities of the person rather than focus on the disability caused by the condition……Conductors are not an amalgamation of current professionals in education, therapy and rehabilitation. They are new, distinct professionals, whose training, experience and methods of working are unique to Conductive Education (PCA, 2009).

0.1.2. Facilitation:

One of the main professional skills of the conductor, facilitation can be psychological, physiological or educational in nature. Applying these skills individually or simultaneously the conductor aims to influence the teaching-learning

dynamic impacting both the individual and the group as a whole.

> ….the variety of possibilities for facilitation is enormous. They include the force of gravity, motor mechanical interrelationships in the organism, and even the synergisms of brainstem reflexes. The important point more clearly distinguishing Conductive Education is that it teaches how to use all these facilitations for learning consciously (Hári & Ákos, 1988, p. 200).

The following places the above within the context of current neurological knowledge:

> Understanding adaptive behaviour in response to nervous system injury requires an understanding of the interaction between the subsystems of the body, the environment, and the continuous feedback between the nervous system, the body and environment (Khan, Amatya, Galea, Gonzenbach & Kesselring, 2017, p. 604).

0.1.3. Facilitator:

With respect to the methods described above, the facilitator is perceived as support to the leader, enabling both individual and group learning and success.

> Conductors are experts in using simple equipment and minimal manual facilitation to help children to achieve success and to teach them voluntary control of movements in time and space. From the children's point of view, the process appears playful and enjoyable, although the conductor is constantly engaged in careful observation, planning, evaluation and implementation (Coles & Zsargo, 1998, p. 72).

0.1.4. Leader:

The role of conductor as leader of the group, demonstrates:

> Skilful use of the dynamics of the group ensure that children learn in a motivating, happy atmosphere where each child is valued and learns to value all other members of the group. While planning needs to be specific, there must also be flexibility to capitalise on situations that arise spontaneously from within the group and from which exciting learning opportunities at times present themselves (Demack, 2004, p. 66)

The professional roles of leader and facilitator are interchangeable across a day/conductive programme. Within a 'Conductor Only' environment it is expected that the conductor will be able to both lead and facilitate groups. Within a multi-professional setting, conductors may find they consistently lead, working with assistants or other professionals as facilitators.

0.1.5. Neurological Motor Disorders:

Typical conditions, in which damage or disease of the central nervous system generate difficulty in movement (Sutton, 2002) impacts children and adults attending CE sessions. These conditions include cerebral palsy, Parkinson's, stroke and multiple sclerosis. In 1995, Kozma and Balogh (1995) made the distinction that the CE term 'motor dysfunction' challenged the World Health Organisation (WHO) definition of disability. By 2011 however the WHO described disability as "complex, dynamic, multidimensional, and contested" (WHO, 2011,p.3), thus opening the door to a CE perspective in which change to neurological status is perceived to be possible, and that diagnosis of, for example, cerebral palsy, does not represent a final end point.

0.1.6. Observation:

The professional skill of observation is closely and strongly connected to that of conductive facilitation. Conductive observation, like facilitation, has three main functions, all of which are integrated simultaneously:

- Operative observation; 'In the moment', enabling reflexive response and interactive dynamic with the learner/group/ environment.
- Progressive observation; Longitudinal Observation. This can cross short-, medium- and long-term timescales.
- Comparative observation; Within the group context, enables understanding of the individual relative to others, with similar symptoms or diagnoses.

The precondition of Conductive Education is continuous experimental observation concentrated in one person, the appointed conductor. Conductive observation extends to physiological processes and movements and further to every minute manifestation of the cerebral palsied child…….this method is absolutely different from the mere conventional registration of clinical examination (Hári, 1968, p. 35-36).

0.1.7. Orthofunction:

This is perceived to be the ultimate aim of Conductive Education. The focus is upon the development of the personality and thinking, as much, if not more than the development of motor function. Orthofunctionality relates to the application of learning within the social context, with focus upon the 'intention' behind the physical action rather than the physical action itself. It relates to the reorganisation of cerebral pathways from a state of dysfunction to a new state of balance (Russell & Cotton, 1994).

> CE coins a new term, orthofunction, which refers to the individual's kinetic potential and personal readiness that can be vastly improved upon, through conductive education. A natural by-product of improved physical function is improved cognitive function….Orthofunction is a term you will come to love because it paints a clear picture in terms of the basic "can do" philosophy of CE versus the "can't" philosophy of a rehabilitative model that points out the abnormalities (Waiss & Borcsok, 2007, p. 34).

It could also be likened to what Martin Seligman articulates in relation to his daughter…

> ….I realised that raising Nikki is about taking this marvellous strength she has - I call it "seeing into the soul" - amplifying it, nurturing it, helping her to lead her life around it to buffer against her weaknesses and the storms of life (Seligman & Csikszentmihalyi, 2000).

…and the description given by the parent of a child with cerebral palsy, as "independence of spirit" (Westcott, 2010, p. 147).

0.1.8. Participant:

The term used within this study to describe the individual attending CE sessions. This relates to children or adults and reflects the perception of them as active learners, participants in an approach that aims to understand them as individuals, with particular focus upon how they learn (Brown, 2006).

0.1.9. Pedagogy:

The philosophical basis underpinning all conductive practice, reflecting the dynamic nature of the relationship between learner and conductor, this relationship supports 'lifelong learning' with potential impact upon both the participant and the conductor (Sutton, 2006, p. 5).

0.1.10. Rhythmical Intention:

The external 'cue' constructed by the leader to facilitate appropriate intention, initiation and control of movement. The rhythm is symptom- and group-specific, guiding the participants' motor learning. Used as a methodological tool linking cognition with movement, its main aim is to (re)enable the automation of movement (Brown and Mikula-Tóth, 1988).

0.1.11. Tasks and Task Series:

These algorhythmic movements taught to participants appear to be exercises but their construction and utilisation within the group go beyond the movement itself. Linked strongly to Rhythmical Intention, the tasks and task series create a focus for the teaching that facilitates the development of motor skills. The participant is then enabled to use these

skills within the learning environment, applying them in everyday functions such as dressing, washing, walking and writing. The tasks and task series create opportunity for condition-, age- and symptom-specific motor learning to take place in all positions from lying to standing, as one task prepares for the next (Hári, 1968).

0.1.12. The Group:

The group is the primary context for learning within CE. Underpinned by social constructionist and constructivist theories, the group provides the context for learning.

> The group setting allows children to learn from each other and from the adults present. This is compared to the individualised therapy settings that are used in many school systems (Ratliffe & Sanekane, 2009, p. 69).

Psychodrama, an interactive group process, in which the inner world becomes visible, and in which 'healing' at an individual level takes place (Pinter, 1997) was constructed by Moreno, a known friend of Petö (Hári, 2001). The role of the conductor in leading this (healing) dynamic is therefore significant.

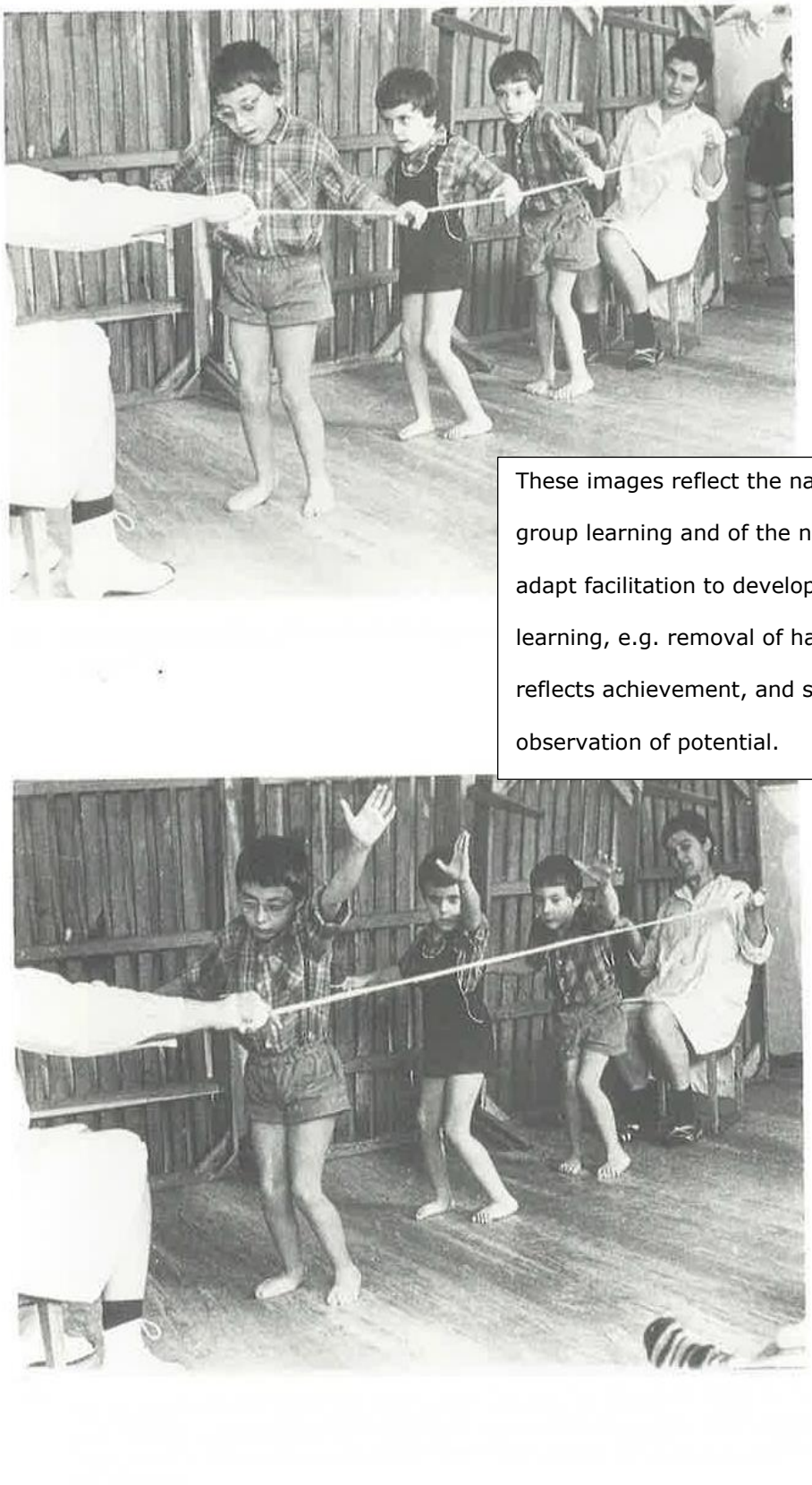
0.1.13. The Human Principle:

The link between the individual with the disability, the environment and the conductor represents the triad underpinning the 'human principle'. With a focus upon the individual as an active learner, the conductor as teacher, constructs an environment that supports their learning. By keeping the focus upon the learner; what motivates them, how they learn and what they need to learn, the conductor is able to focus on ability rather than disability. With a clear focus upon the individual and their aims it is possible to teach them how to gain control over their movements and so engage with their environment. In this way learning develops and the individual is enabled to become orthofunctional (Hári,1988).

0.1.14: Glossary Summary:

The above descriptors aim to create an understanding of CE as a complex integration of theory and practice, guided by an underpinning belief in human potential, delivered through the conductor as the professional who personifies this process of integration. This glossary aims in some manner to present CE as an integrated holistic approach to working with individuals with neurological motor disorders. With an underpinning belief in the individual's potential, CE and the conductor who

delivers it have the potential to be truly transformative. The following Figures (0.1-0.3) serve to reflect aspects of CE articulated in this glossary with a view to contextualising aspects of practice as both familiar, and unique to CE. The images are chosen for their ability to highlight learning within the group, the use of facilitation to develop potential, and the application of skill linked to previously learnt movements. Whilst orthofunction cannot be demonstrated by image alone, inclusion of Figure 0.3 serves to demonstrate the link between movement, motivation and the development of the learner's problem solving abilities.

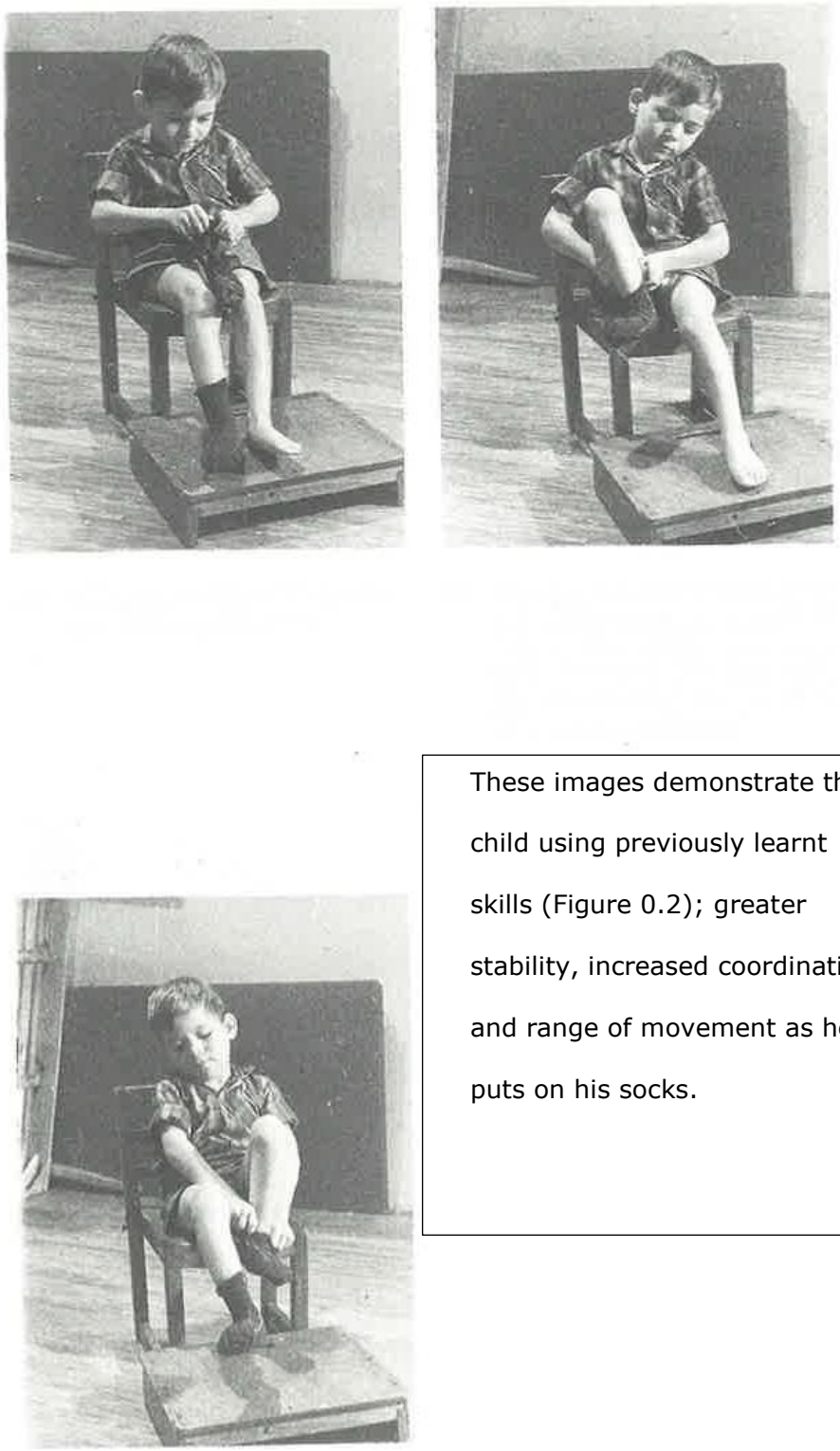


These images reflect the nature of group learning and of the need to adapt facilitation to develop learning, e.g. removal of hands reflects achievement, and supports observation of potential.

Figure 0.1. (Hári & Ákos, 1988, p315)

These images demonstrate tasks that prepare for application of skill (in Figure 0.3).

Figure 0.2. (Hári & Ákos, 1988, p309)



These images demonstrate the child using previously learnt skills (Figure 0.2); greater stability, increased coordination and range of movement as he puts on his socks.

Figure 0.3. (Hári & Ákos, 1988, p310)

0.2. Rationale for Writing in the First Person:

With recognition of the need to create a trustworthy trail of inquiry (Horsburgh, 2003), consideration of the reflexivity of the researcher within this mixed methods study is important. Reflexivity, the ability to be constantly in a reflective dynamic in which analysis and synthesis of actions is an ongoing process (Webb, 1992; Hardy, Titchen, Manley & McCormack, 2006) forms part of my justification for this professionally- and personally-motivated study. My presence in this study, in keeping with qualitative principles (Horsburgh, 2003), is subjective. To ignore this would deny my presence within it, impacting both the audit trail (Webb, 1992), and possible "replication" (Morse, 1999). Writing in the first person, as part of this reflexive process, has potential to make explicit my role in this research process, whilst also recognising that presence of self does not automatically equal the construction of rigorous research (Pillow, 2003). With this in mind, it is worth recognising that a process of reflexivity appears fraught with difficulty, challenging the established views on academic writing, but also myself as the author, to combine intuition and cognition, the personal and the impersonal (Holmes, 2010; Davies, 2012), the qualitative, quantitative, subjective and objective.

The inclusion of personal background, and personal involvement beyond the literature is considered a strength (Rose & Webb, 1998; Probst, 2015), whilst use of the research process to objectively facilitate creativity and insight, rather than be contained by its rules is also perceived essential (Darawsheh, 2014). Acknowledging reflexive researching and writing as messy, Probst (2015) concludes that it "bolsters credibility by parsing the research endeavour into its mutually affecting parts and documenting pathways through which knowledge was generated" (Probst, 2015, p. 47). I have used this as a guideline for my writing, aiming to justify decisions, within the context of my professional and personal experiences. Eraut (1993), writes that "people are more likely to notice what they are looking for, and to see what they expect to see", and so with this in mind, I aim to stay as true as possible to the data, whilst recognising the need to synthesise and develop ideas (Morse, 1999). My aim in this study is to construct an understanding of expertise within a specific professional context. As an 'insider researcher' my inner conflict relates to my ability to connect with the research participants at a personal level, whilst constructing an objective analysis of data in keeping with the elements of the underpinning methodology, Personal Construct Theory (Jankowicz, 2004). As I begin this study, I

think I know what I am looking for, am afraid I will not find it, and when I do I realise it is only a very small part of my answer. Referring to constructivist grounded theory (Charmaz, 2017), I am enabled to reflect upon my own influences, interactions and expectations, and in this way I trust I have done justice to Charmaz's concept of 'methodological self-consciousness' and her recognition that "the questions we ask matter; the perspectives underlying our questions count" (Charmaz, 2017, p. 34).

ABSTRACT

Conductive Education (CE), a psycho-pedagogic approach to working with individuals with neuromotor disorders (Sutton,2002), is practised in Statutory and Third Sector health and education provisions within the UK. This fact alone raises the need to explore the role and professional accountability of the conductor as the professional delivering this programme of education. Whilst there is a Professional Body (Professional Conductors Association) (PCA) and a requirement for validated Continuing Professional Development (CPD), there is no benchmark for expertise, or identification of the characteristics, skills and knowledge associated with it. This thesis as an exploratory study of conductors' perceptions of expertise is the first of its kind to be undertaken with conductors working in the UK. CE, underpinned by both constructivist and constructionist methodologies (Grundtvig, 2012), fits well with Personal Construct Theory (PCT), the chosen methodology for this study.

This study is undertaken in two main phases. In the first, Repertory Grid Technique (RGT), as a research method associated with PCT (Hagans, Neimeyer, Goodholm, 2000), is

used to interview 20 Conductors working in the UK. Principal Component Analysis (PCA) is used to construct a quantitative analysis of individual grid findings, a process that serves to underpin subsequent thematic analysis. An iterative process of thematic analysis, influenced by Constructivist Grounded Theory (Charmaz, 2006), facilitates synthesis of the conductors' perceptions of expertise.

Expertise is perceived by the conductors to be holistic in nature and comprised of belief, personality, knowledge and skill. With reference to the pragmatist underpinnings of Positive Psychology, (Peterson & Seligman, 2004), items generated in phase one are subsequently used to construct a 92-point questionnaire. This questionnaire as a self-reflective measurement tool serves to complete the aims of this study.

This exploratory study broadly fulfils its aims and addresses expressed need for greater accountability, academic justification of practice, desire for professional development and pragmatism within CE (Kozma, 1995). Weaknesses are identified, however the findings of this study serve to raise awareness of expertise, impact practice and conductor training.

Table of Contents:

1. SETTING THE EXPECTATIONS

> "The climate for learning cannot be separated from a climate in which care, concern, and love are central" (Wink & Wink, 2004, p.8)

1.1. Format of Thesis:

Conductive Education (CE) is the professional context for this study into perceptions of expertise. CE, in one sense unique, also has parallels with other person-centric professions, such as nursing and teaching, in which the climate for learning extends beyond the concrete and functional. This introductory chapter outlines key aspects of CE, and identifies the main personal, professional and research based justifications for this study. Prior to this chapter a glossary of terms and concepts specific to the CE context is presented. Whilst the features identified may not in themselves appear unique, when put together they represent a unique approach to working with children and adults with neuromotor disorders, such as Parkinson's, stroke, multiple sclerosis and cerebral palsy. This introductory chapter aims to generate sufficient insight to CE as a profession as similar to others, but essentially unique. This demands of the reader an ability to assimilate knowledge of a profession, and of disability,

neither of which they may have any personal or professional experience of. For myself as the author, there is a requirement to explain the necessary detail, whilst for the reader it demands a requirement to come to this study with an open mind. It is not CE that is under the microscope. It is my own ability to undertake a rigorous study, in which the justifications, processes and analysis of findings are presented in a transparent, reflective manner. This study should be judged on my ability to achieve this, and in so doing, the reader should also have a clear picture of the cardinal features of the conductor as the professional, and as the person at the centre of this study.

In this context, it is also relevant to define the terms *idiographic* and *nomothetic*. With reference to Kelly (1963), the idiographic refers to the individual's construing and ability to "anticipate events" (Kelly, 1963, p. 88). The nomothetic is the generalizable representation of the context against which the idiographic is measured. Both of these measures have their advantages (Fransella, Bell & Bannister, 2004). Within this study the nomothetic serves to represent a generalised analysis of twenty conductors' perceptions of expertise, whilst idiographic representation of findings serves to differentiate the individual from the abstracted perspective.

There is no assumption that the generalizable is representative of all conductors, however with reference to contextual factors, it is possible to highlight aspects that appear to influence both the idiographic, and which may also have relevance to the nomothetic perspective (Grice, Jackson & McDaniel, 2006).

Whilst chapter 1 highlights the cardinal features of CE, chapter 2 positions CE in a wider professional context and within the context of other research studies in which the focus is expertise and the factors that influence professionals' perceptions of it. Use of literature serves to underpin the research questions and the justification for the study. Chapter 3 addresses constructivism, and in particular the underpinning methodology; Personal Construct Theory (Kelly, 1963). Chapter 4 outlines the methodological choices made. In particular the application of the Repertory Grid Technique as the associated mixed-method approach, and analysis of data by use of Principal Component Analysis (PCA) and thematic analysis, influenced by Charmaz's Constructivist Grounded Theory (Charmaz, 2006), are presented. In chapter 5 the idiographic findings of the 20 Repertory Grid interviews are summarised. In chapter 6 the synthesis of these findings are discussed and presented in a nomothetic

context as preparation for the construction and evaluation of the professional development tool in chapter 7. In conclusion, chapter 8 creates opportunity to consider the research process itself and reflect upon the implication of findings at both professional and personal levels.

1.2. Research Context:

CE, as a pedagogy and person-centred profession, can be paralleled with teaching (Hattie, 2003; Kinchin, Cabot & Hay, 2008), and nursing. These professions, constrained in their development because of small numbers, salaries and social recognition (Eraut, 1994) have their own difficulties in gaining social recognition and professional confidence, factors considered to impact best practice (Berliner, 1994; Thorne, 2000; Fotheringham, 2013). These comparators are highlighted largely to position CE within relatable professional contexts; positively in the sense that they all work with vulnerable individuals, whilst also recognising that all have had to articulate their professional role against a medical, or deficit model (Barker & Rolfe, 2004) with its desire for positivist, quantifiable solutions and answers. As part of a larger professional debate, positioning CE within a wider context has potential to strengthen conductors' confidence in their own perspectives. By articulating not only the parallels,

but also the unique features of CE, it is possible to present CE as a necessary part of a diverse service to the local population (Saks, 2003). The purpose of this study, to empower conductors, involves them at all stages and aims to support them as active learners, proactive in a process of development towards expertise.

1.2.1. The Personal, Professional Context:

As a Registered Nurse, working for the NHS, I have been able to follow a structured professional development pathway (Sandehang & Tutik, 2017). This process enables and supports progression, and the development of professionalism (Fetzer, 2003), however it does not fulfil my personal ambitions. I chose to opt out of this pathway two decades later. Qualifying as a conductor in 2005, however, does fulfil my personal goals, and creates a new perspective on health and wellness. I am now able to observe and work with individuals with the same neurological motor conditions as I had been working with in the NHS, in a completely new way; one that excites me, and empowers both myself and the learner, with the skills and confidence to perceive the future with greater hope and positivity. This creates opportunity for success at a personal level. At a professional level however there is no structured format for development.

Having gained from the opportunities within the NHS, I now want to support my conductor colleagues in their professional development. In particular I want to achieve this in a way that reflects the unique aspects of CE; primarily the belief that change is possible (Feuerstein, 2008), and that learning is lifelong (Sutton, 2006). The focus of this study is to support development towards expertise in a way that fits with these underpinning principles of CE. The Conductive College, as part of NICE Centre for Movement Disorders, is the only centre for conductor training within the UK. As Programme Director for the undergraduate course of conductor training in 2013, I am in a position to influence the training of conductors of the future, and impact the development of CE within the UK. My hope is that if it is possible to enable conductors to develop expertise at a personal level, it may be possible to further development within the profession.

1.2.2. Conductive Education as a Profession:

Conductive Education, originating in Hungary in the post WW2 period (Ratliffe & Sanekane, 2009), formally arrived in the UK in the 1980s. The need for a recognised conductor qualification as well as validated levels of competence, experience and professional development was expressed as

far back as 1995 (Kozma, 1995). Whilst these comments were made in the midst of the expansion of CE across the Western World, they still hold resonance today. The first UK-trained conductors graduated from the University of Wolverhampton in 2000. Since then, postgraduate modules have developed and it is now possible to complete an MA in CE. There is however no definition of expertise, and no formal benchmark for development towards expert practice. Trainee conductors achieve a level of professional competence, measured against a comprehensive list of professional standards, set by the Professional Body (Professional Conductors Association, 2017). Once qualified however, it is left to the individual and their employer to use these standards to set goals and guide Continuing Professional Development (CPD). This may or may not relate to practice, and does not formally influence development of expertise within the profession. The Professional Conductors Association (PCA), established in 2009, holds a Register of circa 100 Hungarian and British trained conductors working in the UK (PCA, 2019). A requirement of registration is completion of 25 hours of CPD annually. In order to support this process a CPD tool exists (PCA 2013). This tool, as a document, supports the conductor in defining and working towards their own specific goals, achievement of which is

generated from both formal and informal learning opportunities. PCA members have been actively involved in the development of this document, and are familiar with the process of its completion.

1.2.3. The challenge to develop:

As a PCA Committee Member, I am the person who receives the completed CPD forms, submitted from conductors selected using a process of randomisation. Anecdotally, whilst I perceive conductors as keen to engage with this process, and do so diligently, I feel that there is also a lack of understanding. This is not related to the task itself, more that there appears to be a 'disconnect' from the larger professional picture. Conductors can discuss and record what they do and what they learn. It seems harder however for them to consider these learning opportunities and achievements as steps towards a more comprehensive goal. This is not to say that conductors do not aim for professional status, or shy away from taking greater professional responsibility. Conductors are present in roles of responsibility in schools and CE centres, as well as running their own CE centres (PCA). Rather my concern is that there is no structure to support development of the conductors themselves. At present, whilst there is a means by which

conductors can record events, there is nothing that enables them to consider development of themselves, as self-actualising professionals. This has potential to impact not only at an idiographic, but also the nomothetic level. Conductors are employed, and service users continue to want CE, however an explicit measure of expertise relevant to both the idiographic and nomothetic may positively impact the development of expertise within the profession.

1.2.4. The Need to Take Responsibility:

It could be argued that if service users continue to want CE, and that conductors take responsible measures to develop professionally, then there is no concern. Conductors use the CPD tool, set goals and achieve them. This is not in dispute. My concern relates to the wider context of professional development. Comprehension of common perceptions of expertise is seen to support professional development (Eraut, 1993). At an idiographic level this is considered to influence professionals' confidence and ability to articulate their understanding of it (Hardy, Titchen, Manley & McCormack, 2006). Comprehension of expertise however goes beyond the idiographic. At a nomothetic level, ongoing research into, and support for, professional development towards expertise is considered essential for organisational (Germain & Tejeda,

2012), and professional (Jasper, 1994; Kozma, 1995; Hári, 2001), social recognition and survival (Germain, 2006), as well as fulfilling a moral obligation to service users (Eraut,1993; Marble, 2009; Lyon, Hoover, Giusti, Booth, Mahdavi, 2016). Conductive education is no different. Conductors, and their employers have a responsibility to provide a sustainable service that continues to be relevant, relatable and resilient. A means by which common understanding of conductors' perceptions of expertise can be articulated has potential to influence professional development at both idiographic and nomothetic levels.

1.2.5. Motivation for the Study:

Whilst there may be few research studies in which perceptions of expertise have been explored (Germain, 2009), without an initial study of these perceptions within CE, it is difficult to create a tool to measure or develop towards it (Germain & Tejeda, 2012). This study is strongly influenced by my experiences of working in the NHS. I perceive that a common structure for professional development creates opportunity for learning and implementation of best practice. Now, as a conductor working within a holistic paradigm, my ultimate aim is to create a structure for professional development that truly

reflects the holistic nature of this profession, and represents both the idiographic and the nomothetic. With this in mind, it is relevant to consider first the professional context.

1.3. Conductive Education:

1.3.1. Overview:

This section outlines the key elements of conductive education, and the professional and personal skill set of the conductor. The glossary (0.1.-0.1.14.) identifies specific roles and aspects of CE practice. This section now aims to generate a more specific understanding of the conductor role and the factors that may influence perceptions of expertise.

With little justification for success relative to parallel provisions (Bairstow, Cochrane & Hur, 1993; Ratliffe & Sanekane, 2009), CE continues to have a presence across England and Wales (PCA, 2019). Present in the UK since the 1960s, CE adapted from Hungary in the 1980s still appears to fit the needs of the UK population. In order to develop an understanding of CE in its widest sense, an historical perspective on events at the time, from pre-First, to post-Second World Wars would be required to consider the complexity and development of CE as a pedagogy (Sutton, 2006). This vast role is beyond the boundaries of this study,

however recognition of the journey of CE creates an awareness of thinking and practice that came, as Sutton (2006) recognises, from a time that is both creative and destructive. This has implications for practice both then and now in the 21st century. Conductive Education perceived as being "ahead of its time" (Hári, 1988, p. 1; Hári, 2001; Kozma, 1995), with respect to its philosophy and application of these underpinning beliefs and perceptions to practice, in part makes it hard to rationalise or completely comprehend. Current thinking with respect to neuroplasticity (Khan, Amatya, Galea, Gonzenhach, Kesselring, 2017), humanistic and self-actualisation theories encompassed within positive psychology (Hefferon & Boniwell, 2011), and applied to rehabilitation interventions (Bertisch, Rath, Long, Ashman, Rahsid, 2014) however aids comprehension of CE.

In contrast to a medical model 'cure', CE is described as a psycho-pedagogical approach to the teaching of children and adults with motor disorders (Sutton, 2002; Brown, 2006), incorporating a spectrum of professional perspectives. Learning is perceived to take place within a supportive environment (Hári, 1988; Kinsman, Verity, Waller, 1988), the aim being that the individual becomes active in their own learning rather than passively being a recipient of

"treatment" (Goodall, 1993, p. 81). In this context, CE is perceived to be an educational intervention designed to work with the 'whole' person. There is no separation in understanding of the individual; they are part of their physical and social situation. With a view to developing the personality "behind the function" (Kozma & Balogh, 1995, p. 71), the individual is taught to learn to live with the condition, rather than be defined by it (Brown, 2003). This is done by 'leading' learning, towards a problem-solving approach. As a consequence, a change in thinking brings about a change in both affect and motoric control with the application of subsequent skills relevant to the social setting (Hári, 2001; Sutton, 2002). The individual responsible for the development of this learning is the conductor. It waits to be seen if conductors perceive themselves as significant in this process of change, or if their own fears and limitations impact their ability to work with the individual and develop their potential (McGrath & Davis, 1992).

1.3.2. Early Beginnings:

CE was conceived by Andras Petö, (Hári, 2001) an Hungarian Jew who completed his medical training in Vienna from 1911-1921. Developed after the Second World War, CE became a statutory provision for children and adults in Hungary in the

1960s (Proctor, 1996). CE developed during a time when key thinkers and philosophers, such as Freud (Hare & Hare, 1996), Moreno (Hári, 2001; Pinter, 1997; Sutton, 2006) and Pestalozzi (Grundtvig, 2012) were present. Petö, influenced by the people and events of the time (Sutton, 2006) was a student of Rudolph Steiner, and strongly influenced by Eastern Culture and Buddhism (Forrai, 1999). He developed CE without a corresponding theoretical base (Sutton, 2006), and is perceived to live out his theory, acting as a role model (Hári, (2001). He was succeeded in 1967 by Dr. Mária Hári (Sutton, 2009), who along with others (Cotton, 1983; Grundtvig 2012; Hári & Ákos, 1971; Hári, 1988; Kozma, 1995; Kozma & Balogh, 1995; Sutton, 1998) attempted to cite, summarise and translate into English their perceptions and understandings of CE as an educational approach. Some of these are professionals in their own right (Feuerstein, 2008; Read, 1995) whilst others are parents (Ákos & Ákos, 1991) and observers (Hayward, 1985; House, 1968). Of conductors working in the UK, Brown (2000; 2002; 2003; 2006; 2010; Brown & Mikula-Toth, 1997; Brown & Pavel, 2007) articulates the theory-practice link, in a bid to expand understanding of CE as a pedagogical method.

In the 1960s, much of the drive behind the development of CE in Britain came from the work of Ester Cotton (Brown, 2006; Stanley, 1988). However, in 1986, the BBC made a programme called 'Standing up for Joe' which increased parental interest, whilst also, incorrectly, promoting CE as a 'cure' for cerebral palsy (Coles & Zsargo, 1998). Sutton (2006), whose role in the 'transplanting' of CE to the UK is considered significant, tried to support professional development by generating an accurate history of CE into the 21st century (Proctor, 1996). From these beginnings CE has continued to develop.

Anglo-Hungarian training of British conductors from 1988-1992 was the first step in developing a formal professional UK- based presence. Training with Keele Univeristy from 1990-1995, again in collaboration with the Petö Institute developed conductor training incorporating psychology and education as formal elements of the curriculum (Horvath & Kozma, 1997). Undergraduate training, taught independently of Hungary, began in Birmingham in 1997, in conjunction with the University of Wolverhampton, and from 2013 with Birmingham City University who also support postgraduate education, and the delivery of postgraduate modules accessible to both conductors and other professionals. Within

the context of this study, historical background assists in positioning conductors' perceptions of expertise in a wider context of professional competence, continuing development and lifelong learning (Daughhetee, Puleo & Thrower, 2010).

1.3.3. The Aim of Conductive Education:

Perceiving motor disorders as a problem of learning, (Kozma, 1995), the conductor aims to alter the cognitive mechanisms, attitudes and intentions required for goal-orientated action (Hári, 1997a). The conductor achieves this by generating a two-way dynamic with the learner, facilitating their active participation in the development of 'ortho-motor conduction' rather than 'dys' function (Hári, 2001). As a complex, integrated system with a focus upon cognitive development rather than functional performance (Hári, 1997b), and in contrast to a therapeutic approach, CE claims neither to cure nor treat. In contrast to social and medical deficit models it blames neither the individual nor the environment. Rather, it is based upon a belief that a dynamic relationship between the two can transform the individuals' psychological approach and their ability to interact with the environment (Lion, 1997). With a focus upon the development of the educational relationship with the learner, the conductor teaches motor skills (Brown & Mikula-Toth, 1997). In this way the individual

is enabled to learn movement patterns, rather than motor functions or isolated functional skills. These learnt movements can then be applied to different situations, in contrast to specific functions, applicable only in specific situations and contexts. Cognition is converted into action (Brown & Mikula-Toth, 1997). This creates opportunity for learned motor skills, as well as the inclusion of spontaneous movement into everyday life. Described as ortho(good)-functional spontaneity (Hári & Ákos, 1971), Petö believed that the individual with potential to learn and develop has capacity within to correct their dysfunctions (Biro, 2006). As such they are able to impart greater control and so make 'real choices' (Brown 2003). House (1968), an observer of CE in Hungary, observed this stating

> They (the conductors) do not manipulate the children, nor help them beyond what is necessary as a temporary measure…what they do is help the child to realise above all that everything emanated from within *himself*. He has the seed within himself of all that is normal and right for him (House, 1968, p.113).

1.3.4. CE as a Pedagogy:

Pedagogy signifies structure, so an interactive dynamic between the teacher and the child in which learning occurs was considered "alien to our experience and way of thinking" (Simon, 1981, p. 125). Twenty years later, Shulman (2005) recognises that professions have their own pedagogies which impact upon the ways in which they teach future generations to "…understand in order to act, and (they) must act in order to serve" (Shulman, 2005, p. 53). Describing these signature pedagogies as forming "…habits of the mind, habits of the heart and habits of the hand" Shulman (2005, p. 59) serves to position CE within a professional framework of belief, practical skills and a robust structure within which they can be delivered (Schenker, 2018). With a focus upon ortho- rather than dysfunction, CE as a pedagogy, and the conductor as pedagogue, bring together movement, language and cognition within a co-operative social context (Hári, 1968;Sutton, 2014).

With a focus primarily upon the development of the personality, improved motor control may to some extent be seen as secondary (Kozma, 1995). In this way CE has potential to ensure that children learn, and adults learn to teach within a social context (Sutton, 2014). CE considers

itself transformative not only because it is based upon a philosophical belief in potential to learn, but because it is the learning that creates the potential for change (Schenker, 2018). The conductor, likened to the conductor or leader of the orchestra (Petö, undated), is central to CE (Horvath & Kozma, 1997; Kozma, 1995). House (1968) perceives that it is the conductor's role, and duty to create an atmosphere in which the development of "spirit" (House, 1968, p.10) facilitates learning.

1.3.5. The Conductor as Pedagogue:

The conductor, perceived as a professional role within Hungary in 1980 (Hári, 2001), went unrecognised within the UK (Brown & Mikula-Toth, 1997). In the 21st century, this is now no longer the case. Whilst other aspects of CE practice relate to, in particular, the motoric and cognitive elements of the conductive session, they are nothing unless delivered by the conductor. With a focus upon active learning, the conductor role is to facilitate the teaching of movement by use of language, rhythm, active participation and repetition (Petö, n.d.). The primary means of achieving this is the "….integral all-encompassing unit" formed between the conductor and the learner (Petö, n.d.). It is this dynamic that I perceive as the key to expert practice, and the letters

between Petö and Ester Cotton (Petö, n.d.) referred to above provide the basis upon which further exploration of the conductor role is considered.

The conductor acts as a catalyst (Hári, 1988) demonstrating movement in a manner that keeps the learner active (Petö, n.d.). In particular by means of their creativity and responsiveness (Hári, 1988) the conductor is able to activate human potential. It is a consequence of the way in which the conductor enables learning to take place, as the learner generates their own solutions, that they actualise their own capabilities and creativity (Hári, 2004). In this way the conductor is required to face and overcome life's difficulties, develop expectations and level of attainment in the learner, be able to deal with change, and develop professional knowledge and qualification (Hari, 1988; 2001). As the conductor role is considered in a wider professional perspective, it may be possible to contextualise individual characteristics; the way in which the conductor delivers CE, and their impact upon the learner, the group, and ultimately upon themselves as learners.

1.3.6. Expertise within CE:

Whilst there may be no formal description of expertise within CE, this may to some extent be related to the fact that due to its holistic and integrated nature, the assessment and evaluation of outcome is also complex and fraught with difficulty (Hári, 1997a; Laver & Brown, 1997; Nagy, 1997). CE has potential to impact upon an individual's subjective interpretations of life, with particular respect to their motivations, attitudes, desires and ability to learn (Mikula-Toth & Brown, 1997). It is this subjective means of evaluation that links most clearly with this study. If it is possible to determine conductors' perceptions of expertise, and engage them in the process, then it may be possible to assist them in directing their intentions towards expertise as an achievable outcome.

1.3.7. Conductive Education within a Paradigm:

Conductive Education, as a complex, holistic, experiential system of education and rehabilitation, aims to address all the needs of the individual, regardless of age (Hári, 1990; Kozma, 1995; Ratliffe & Sanekane, 2009; Waiss & Borcsok, 2007). Generated in a time of extreme political unrest with similar origins to that of Montessori, Pestalozzi, Makarenko, Sukhomlinskii and Feuerstein, CE gives rise to a pedagogy

that empowers, offers hope and emotional freedom to families and individuals alike (Sutton, 2006). Within a 21st century context, CE can be considered to fit within a humanistic paradigm, as an underpinning perspective in Positive Psychology (Hefferon & Boniwell, 2011). The concept of self-efficacy in which expectation is linked to both action and outcome (Law, Ireland & Hussain, 2007) serves to connect aspects of Positive Psychology with both CE and the aims of this study; to empower conductors to reconsider their own practice in a new light, and to perceive development towards expertise as both achievable and essential for actualisation of potential at idiographic and nomothetic levels. A constructivist approach, fitting within post-modern career research, enables development of understanding of the individual within their own professional context (McMahon & Watson, 2007). As such, the concept of the individual as an active participant within the research study fits with the professional context of CE in which the individual learner is expected to be active within their own learning strategy (Hári, 1988). Hári (1996) describes CE as providing "…experience, an inner image of a new way" (Hári, 1996, p. 5). Recognition that experience and education are required for a change in internal representation and intention to occur (Hári,1997a) support the aims of this study; to gain insight

into conductors perceptions of expertise, from which to impact practice and professional development.

1.4. Summary

With reference to the skills and knowledge required at both personal and professional levels, this chapter outlines the key features of CE as a pedagogy, and of the conductor as pedagogue. With more than 20 CE centres in the UK (PCA, 2019), and around 100 conductors registered with the Professional Body (PCA), all of whom participate in 25 hours of CPD annually, this study aims to raise awareness of expertise and to assist conductors reflect upon their own practice in a meaningful way. The following chapter places CE and the aims of this study within a wider professional context.

2. PLACING EXPERTISE IN A FRAME.

"Man is capable of changing the world for the better if possible, and of changing himself for the better if necessary" (Frankle, 2004)

2.1. View Of The Bigger Picture

This chapter outlines relevant research studies and literature, the purpose of which is to determine the justification for this study. Expertise as a concept has gained in significance since the 1950s, however is still an area that is poorly researched. If it is possible to identify aspects of practice as 'expert', then it may be possible for conductors to aspire to them, with positive impact on those with whom they work.

CE is a relatively new profession within the UK. As such it has received limited academic exploration, and none with respect to the advancement of professional development. Without an articulated awareness of expertise and how it may be achieved, it is possible that individual conductors develop on their own, without a view of the 'bigger picture'. Similarly, employers and the Professional Body (PCA) are also in danger of developing and supporting practice in isolation. The risk of this to the profession as a whole, is that it loses

identity (Sutton, 2001), and with it, professional status. To this end, this chapter serves to underpin the direction of this study, and validates justification for the study itself.

2.1.1. Why Expertise?

This study, with a focus upon conductors' perceptions of expertise, is underpinned by the analysis of Eraut (1993) that a person-centred service has a "moral obligation" (Eraut, 1993, p. 232) to develop professional excellence. It also fits with the reflections of King et al. (2007), who perceive therapist expertise to be both valuable and worthy of investment. Position these perspectives alongside those outlined in chapter 1; the historical transplantation of CE from Hungary to the UK (Sutton, 2006), the development of a profession without a robust academic background (Hári, 2001; Sutton, 2007) and inconclusive evidence-based research (Hur & Cochrane, 1995; Ratliffe & Sanekane, 2009), mean that exploration of expertise and perceptions of it within the profession can be considered both relevant and overdue.

With reference to the underpinning beliefs and aims of CE, as a person-centred profession, in which actualisation of potential and a desire for learning (PCA, 2009) are set within

a constructivist paradigm (Grundtvig, 2012), this chapter aims to be the central point to which all sections of the study link. CE as a holistic approach to working with individuals with neurological motor disorders can be positioned against other person-centric interventions, such as nursing and teaching. By defining the goalposts of expert teaching it is possible to improve practice, and empower teachers to define what they value and aspire to (Hattie, 2003). In a similar way, this study aims to empower conductors by creating a 'goalpost' from their articulations, towards which they can 'shoot'.

Positioning CE within wider professional, historical, social and political contexts also increases the utility and applicability of this study (Lyon, 2015). The work of Benner (1984), in its exploration of expertise within nursing provides a professional context against which to position CE. Perceived to be politically motivated, influenced by feminist thinking of the time (Nelson & McGuillion, 2004), Benner (1984) desires a common language and opportunity to articulate the tacit aspects of knowing within nursing; her aim to increase individual confidence and skill, as well as to positively impact on the profession as a whole. Similarly, Eraut (1993) raises concern for professions akin to teaching to articulate their

practice and knowledge base in order to retain a credible presence. Widening of the professional context gives insight to perceptions of expertise as a holistic state, one in which science and art (Aydelotte, 1984), professional and personal (Hardy, Titchen, Manley & McCormack, 2006), theory and practice (Benner, 1984) are combined and live out in the individual (Hári, 2001).

This chapter explores the ways in which expertise is defined, perceived and understood. Identification with other professions strengthens professional identity, and improves the lives of those who seek our help (King et al., 2014). Insight into the ways in which expertise is perceived has the potential to influence the direction in which the profession develops (King et al., 2007). The development of a more complex understanding of expertise has the potential to shed light on factors that positively influence practice. In particular it is relevant to consider the ways in which knowledge and learning develop, alongside the factors that influence this process. Consideration of the impact of professional development on conductors, service users and their families reinforces both the 'moral obligation' and the 'perceived worth' of this study. It is with these thoughts at the fore that this chapter is written. Analysis of studies relating to the

research methods and methodological underpinnings are also considered in chapter 3.

2.2. Search Criteria:

This literature review reflects a search of research and non-research-based literature. EBSCO host databases are selected to search psychology, education, health and associated sources: Academic Search Complete, British Education Index, Cinahl plus, eBook, Education Research Complete, ERIC, Medline, Psych and Behavioural Science Collection, Psycho INFO, Soc Index and SPORTDiscus have been utilised. Preferentially peer-reviewed articles in academic journals have been sought, with initial searches spanning from 1999-2009, and added to over time. Extant and seminal works, for example, those by Polanyi, Kelly, Benner, Dreyfus and Dreyfus, Eraut, are explicitly sourced and considered within a wider timeframe (1970-2018). Secondary references from primary articles are sourced where appropriate.

Keywords and phrases include novice, expert, expertise, nursing, teaching, midwifery, occupational therapy, social work, Personal Construct Theory (PCT), Repertory Grid Technique (RGT), constructivist methodologies, attitudes,

beliefs, thinking, perceptions, positive psychology, rehabilitation.

Initial searches place expertise the factors that influence its development, and means by which it is measured within both person-centred professions, and business contexts. Similarly, use of PCT and the RGT are applicable within a range of contexts. Where this is seen to expand my understanding of both expertise and constructivist methodologies, then articles are included, however, in order to keep the focus of the search within the aims of the research study, articles that are sourced under the above search words and phrases, in which the primary focus is upon outcome measures, student learning and, or development are excluded.

2.3. Conductive Education as a Profession

If CE is to be positioned relative to other professions, it is perhaps worth reflecting upon the concept of profession, and how it is itself perceived. Professional boundaries considered difficult to define (Eraut, 1994) are differentiated into major professions such as law and medicine. Minor professions are aligned with teaching and social work (Glazer, 1974). When CE arrived from Hungary in the 1960s (Cotton, 1965), it was considered a new profession, one not fully recognised

(Stanley, 1988; Brown & Mikula-Toth, 1997). Since then, as outlined in chapter 1, much has changed, and CE now sits with other person-centred professions (Bassot, 2016).

2.3.1. Professional Status:

The purpose of this study is not to define professional status, nor to consider the implications or reasons for a mismatch between knowledge and skill (Schön,1983; Tsangaridou & O'Sullivan, 2003). Rather with a focus upon conductors' perceptions of expertise and of the factors that influence them, reflection upon what being professional means is worth consideration. Communication considered essential in the process of making the tacit explicit (Collins & Evans, 2009) is central to the professional role. Professional status itself is associated with the ability to use initiative, function autonomously, and demonstrate the ability to mix professional skill with personal attributes (Bassot, 2016). There is a need to communicate at many levels, to take risks, develop collaborative practices, and understand at a personal level who you are (Edwards, 2011).

2.3.2. Challenges to Professional Status:

CE described as a "psycho-pedagogic approach" (Sutton, 2002, p. 38) to working with individuals with neuromotor disorders is reflected in conductors' professional practice perceived to be a unique blend of clinical, educational and psychological knowledge and skills (Alaluf & Rotem, 1997). With this in mind, conductors are warned that practice must prioritise the individual learner over the movement achieved (Kozma, 1995). This conflict reflects that of other professions, where knowledge, skill and artistry co-exist (Schön, 1983; Benner, 1984; Collins & Evans, 2009). Physiotherapists for example are dependent upon the unity of both positivist and interpretivist perceptions (Kel & Owen, 2008). Similarly, the Montessori teacher (2008) is required to attain both the "mechanical skill" and cultivation of the "spirit" (Montessori, 2008, p. 30). Recognition of these conflicts is both relevant and necessary if conductors are to develop expert practice, and cultivate professional status and confidence. It waits to be seen the ways in which conductors' perceptions reflect the dichotomies expressed by other professions. If conductors are able to demonstrate the need for both knowledge and skill, for science and art, it may be possible to increase their confidence in all aspects of their role (Valentine, 1982).

2.4. Expertise: Historical Context:

Original interest in expertise dates back to the 1950s and 1960s with a focus upon computer technology, the role of memory and a desire to understand the cognitive processes involved in problem solving (Dreyfus & Dreyfus,1988; Germain & Ruiz, 2009; Germain & Tejeda, 2012). Although understanding of, and research into, the concept of expert practice is limited, over the past two decades organisational interest in its development and its potential impact upon employees and service users has increased (Germain & Ruiz, 2009; Germain & Tejeda, 2012). More recently, interest in the nature and development of professional expertise (Eraut, 2005) links social, theoretical and political perspectives (Bereiter & Scardamalia, 1993; Germain & Ruiz, 2009). For example, the development of expertise in nursing is explored in light of the financial and service-led pressures of NHS health provision in the 21st century (Hardy, Titchen, Manley & McCormack, 2006). Hardy, Titchen, Manley & McCormack's (2006) perspective that expertise is as much a reflection of the political and social demands of the time, as it is upon individual detail of practice, makes it easier to understand Eraut (1993), who argues that within an educational context, articulation of expertise is essential for the prevention of professional demise and loss of social presence.

With circa 100 Registered Conductors (PCA, 2019), these perspectives are relevant to the development of CE today, and to this study. With the development of both undergraduate and postgraduate training opportunities, CE continues to develop academically and professionally into the 21st century. The study of Bairstow, Cochrane and Hur (1993) (see glossary), however, highlights the vulnerability of CE and other person-centred professions to validate their effectiveness and worth (Darrah, Watkins, Chen & Bonin, 2004; Liptak, 2005). It is therefore necessary to create structures that serve to protect CE as a profession and increase individual conductor's resilience to external pressures. An increased awareness of expertise has potential to develop practice and sustain the profession's moral obligation (Lyon, Hoover, Giusti, Booth & Mahdavi, 2016) to service users. Reflection on the development of other person-centred professions suggests that, if individual professionals are to deliver expert practice, the profession as a whole has to embrace change.

2.4.1. Experience and Expertise:

Expertise, considered to consist of both personal and professional knowledge and 'know-how' (Hardy, Titchen,

Manley & McCormack, 2006), is dependent upon experience, (Valkeavaara, 1999; Wainwright, Shepard, Harman, Stephens, 2011; Dorgo, 2009). It is however, not synonymous with it (Lyneham, Parkinson & Denholm, 2009). It is therefore possible to see the two as related, but uniquely different. If I am to consider the ways in which conductors construe their perceptions of expertise, then consideration of the impact of their experience has relevance.

The Latin adjective "expertus", means "to have tried", or "to have experienced" (Eraut, 2005, p. 173) and is considered to be the root word from which both experience and expertise have developed (Berliner, 1994, Germain & Ruiz, 2009). Over time however these words have come to mean different and opposing things. Whilst expertise may be greater than experience alone, without experience, expert practice cannot develop (Eraut, 2005). Consequentially, length of professional experience is often associated with a level of expertise. For example the expert is perceived to have around ten years' professional experience (Patel, Glaser & Arocha, 2000; Valkeavaara, 1999), whilst the novice is considered as such for around 18 months (Unsworth, 2001). Expertise is however greater than experience alone, and therefore more than the just the passage of time (Benner,

1984). Expert practice is greater than level of skill, professional experience, knowledge or ability to problem-solve (Germain, 2006; Valkeavaara, 1999) and learn (Eraut, 2007). Neither is it domain-, role-, or position-specific (Germain & Ruiz, 2009; Germain & Tejeda, 2012). With these perspectives in mind, it is possible to recognise that expert practice requires more than method alone (Maguire & Sutton, 2004). It is therefore relevant to consider the ways in which expert practice is perceived to develop, and the factors that may influence conductors' perceptions of such practice.

The cognitive processing of the expert is perceived to be both similar to, and different from, that of the novice, and relates to the ways in which knowledge is applied (Glaser, 1985; Hattie, 2003; Wolf, Dougherty & Kortemeyer, 2013). The expert, in part because of experience (Patel, Glaser & Arocha, 2000), is able to put the pieces of the puzzle together in a way that the novice is unable to do. For example within clinical settings, the expert is perceived to both source and uniquely utilise information (Fox-Young, 1994; Unsworth, 2001). Expertise is therefore associated with both problem-solving skills and adaptability (Benner, 1984). The expert uses their memory and knowledge to construct meaning from individual abstracted events. In this

way, the expert improves their ability to problem-solve, (Patel, Glaser & Arocha, 2000), and to be successful (Dall'Alba & Sandberg, 2006). This insight generates understanding of professional development as a cognitive process, related to, but not completely dependent upon, experience. It waits to be seen if conductors' perceptions of expertise will reflect their level of experience. For example will those with more experience, perceive it in a more holistic manner than those with less experience. This leads to consideration of expertise itself, and the factors that appear to influence its development.

2.4.2. Models of Professional Development:

The seminal works of Dreyfus and Dreyfus (1980; 1986) summarise skill acquisition as a five-staged process of professional development; novice, beginner, competent, proficient and expert. Throughout this staged process, acquisition of knowledge, skills and their application expand and deepen. Within clinical nursing, Benner (1984) adapts this model to fit the specific professional context (Eraut, 1994). Applied to a range of professional contexts (Dall'Alba & Sandberg, 2006), the Dreyfus and Dreyfus model provides a basis against which comprehension of expertise and the factors that influence its development can be positioned.

Benner's exploration of the journey from novice to expert raises awareness of the development of context-specific, experience-based skills, alongside a change in cognitive and problem solving abilities (Aydelotte, 1984). Benner (1984) highlights the need for continued adaptability in response to the environment, and the needs of the individuals within it (Benner, 2005). Central to this fluidity and responsiveness is what Aydelotte (1984) describes as the "mystery of expert nursing practice" (Aydelotte,1984 p. v); the tacit, human and artistic dynamics essential to the nurse-patient relationship. Referring to Benner (1984), Stuart Dreyfus (2004), expands comprehension of his original model to highlight the role of emotion in the development of expertise. This he perceives as necessary in the construction of resilience, and of professionalism. The conductor perceived to attain knowledge and skill, is also required to exhibit both "special skills" and "human values" (Kozma, 1995, p. 115). It is the element of artistry, the need for the human element in expertise that makes Benner's work (1984) relevant to this study of conductors' perceptions of expertise.

The five-stage models of professional development (Benner,1984; Dreyfus & Dreyfus,1986) present professional learning as a developmental process; a process in which the

novice is perceived to problem-solve in cognitive and conscious ways, whilst the expert learns to respond automatically (Benner, 1984; Dreyfus, 2004). It is, however, these automated, non-reflective behaviours, in which cognitive input and learning are minimised, that are also perceived to be the Achilles' heel of the experienced practitioner (Bereiter & Scardamalia, 1993, Eraut, 2005). It is the Achilles heel that serves to challenge the Dreyfus' model (Eraut, 1994), and is of interest in this study. With a focus upon the development of potential, rather than actual ability, a stage model of development does not fit well with conductive practice. Consideration of these models does however position the development of expertise within a context, and so is worthy of inclusion.

The extensive review of the literature, by Dall'Alba and Sandberg (2006) broadly challenges the models developed from the work of Dreyfus and Dreyfus (1986) and Benner (1984). Dall'Alba and Sandberg (2006) give credit to these models, however recognise that skill acquisition can be a snapshot of practice at that moment in time, rather than reflect change over time. This has relevance here in the sense that a snapshot creates a framework from which to develop expertise at an individual level. It also creates

opportunity to see the bigger picture, if multiples of these snapshots are perceived as a whole.

The work by Dall'Alba and Sandberg (2006) broadens understanding of the stage models of learning. Whilst this is useful, the authors do not state their own backgrounds or experience. Neither do they position their perspectives within the context of their own epistemology, or that of their profession. This serves to invalidate some of their interpretations and highlights the need for investigation of professional expertise to be implemented by a member of the profession. Expertise is greater than experience, and skill acquisition is more than functional ability (Aydelotte, 1984). Whilst Dall'Alba and Sandberg (2006) recognise that learning involves a personal process of development, they do not apply this comprehension to their own work. With a valid focus upon training and education advancement, they pose more questions than they are able to answer. This weakens their work, and highlights the fact, that whilst person-centred professions may have similarities, they are also uniquely different. A one-size-fits-all approach does not appear to be appropriate, or feasible (Germain & Tejeda, 2012).

This study of conductors' perceptions of expertise, and the factors that influence their construing of expert practice, must therefore highlight the unique features of CE. In this context, as the 'insider researcher' I must also clearly outline my own ontological and epistemological position if the findings and analysis are to be considered valid.

Development of expertise and the ways in which learning take place are complex and varied. In this study, whilst models of skill acquisition are relevant, insight into the factors that influence learning and development may be more significant.

2.5. The Impact of Work-based Learning:

When reflecting upon learning within the workplace, two factors hold significance; the organisation's work ethic and the nature of its social construction (Eraut, 2004a). Whilst Eraut (2004a) focuses upon the influence of management styles and approaches, he recognises the potential impact of teamwork and belonging, upon the individual as a learner.

The process of implicit learning is influenced by others (Eraut, 2004a), in the form of conscious co-construction of knowledge. This impacts upon semi-conscious learning. In order to maximise these experiential learning opportunities,

self-reflection is considered significant, particularly in reducing the impact of bias (Eraut, 1993, 2004a). These biases are both generated by, and impact upon, the relationship with the developing professional. With a focus upon conductors' perceptions of expertise, awareness of the influence of the social, experiential learning environment is relevant.

The work of Eraut (1993, 1994) as an educationalist, is relevant to CE, a person-centred pedagogy. In the context of this study, Eraut's work (1985, 1994, 1995, 2001, 2004a, 2004b, 2005, 2006a/b, 2007, 2011) is significant for his perspectives of expertise, and the factors that may influence its development. In contrast to Dall'Alba and Sandberg (2006), Eraut (1993) is explicit in his interest in the acquisition of knowledge and the processes involved in acquiring professional behaviours. Eraut (1994) perceives the Dreyfus model to highlight the complexities of skill-acquisition, as the novice gains experience and proficiency. Rather than perceive learning as a staged process, Eraut is concerned to support development of expertise as a dynamic process of learning, rather than a static endpoint. Eraut's (2004a) interest is in determining the processes by which learning occurs and the factors that impact these processes.

Rather than specifically explore the journey of knowledge acquisition, Eraut (1993) considers the difference between the experienced and expert, and develops inquiry into the implicit and explicit processes involved. With interest in how professional learning takes place, he expands understanding of the significance and need for both automation and cognition, and reflects upon the factors that influence individual learning. It appears that it is not experience per se that creates expertise, but the interaction of the individual with the environment, and the task to be learnt, that creates change (Eraut, 1993). This fits with the human principle (see glossary) in which the individual, the environment and the conductor are perceived as a triad.

Eraut (1993) validates his own thinking by linking it to Kelly's Personal Construct Theory (1963), the basis of which involves the development of "schemas" (Eraut, 1993, p. 227) as a product of experiential learning. These schemas support the individual's perception of the world, and enable, or restrict further learning. In this way, previous experience has potential to impact perceptions; in particular the individual's ability to see and anticipate.

Recognising that professional, theory-practice-based knowledge, is significantly tacit in nature, dependent in part upon previous academic and personal life experiences, Eraut (2007) expands understanding of tacit knowing and the social and cultural influences upon learning. Tacit, or personal knowing is representative of who the individual is, and of how this impacts their behaviour (Eraut, 2007). Tacit knowledge, as multi-factorial and personal, reflects the implicit nature of learning, (Eraut, 2004a). As such, further consideration of tacit knowledge as significant in the development of expertise is necessary.

2.5.1. Tacit Knowledge

Irrespective of the professional context the wide base of professional and personal knowledge that is associated with the development of expertise, is tacit. In contrast to "formal or propositional" knowing (Collins & Evans, 2009, p. 23), tacit knowing (Polanyi, 1969) arises from the trial and error process of problem-based, experiential learning (Dunphy & Williamson, 2004). As such, tacit knowledge is difficult to articulate (Eraut, 1993; Schön, 1983). Learning in this way, albeit a necessary part of development and expertise (Herbig, Bussing & Ewart, 2001) exposes this process of learning as potentially flawed. Tacit knowledge has the

potential to develop behavioural change in response to learning (Osterman & Kottkamp, 1993), however by definition, this also has potential to impact learning in a negative way (Valkeavaara, 1999). This highlights the impact of the environment upon learning and strengthens the perspective that learning from others can be both positive and negative.

The extant works of Polanyi (1969) give licence to explore the personal meaning attached both to the world that we live in, of which we are a product, and the world we have the potential to create, by the actions we produce. For Polanyi (1969), knowing, is the dynamic between the internal and external realities; the analysis and integration of both, in which the whole and its pieces are understood. By this, Polanyi (1969) articulates the need to believe that we are a product of, and an influence upon, our society, our context, our reality. This to some extent is done intuitively as we reach out externally, driven towards elements that have meaning to us. In this way we link our tacit understanding to the external, explicit world with which we interact (Grene, 1969), and embody (Dall'Alba & Sandberg, 2006). This can be likened to the use of external tools, for example, a hairdresser cutting hair will use the scissors in a way that is

meaningful for them to create the look they are aiming to achieve. This is significantly different to the behaviour of someone unused to cutting hair. It is not the scissors that create the haircut, but the individual using them who has the vision, the experience and the ability to know what is effective. In relation to CE, it is not the mechanics of conductive practice or the equipment that makes CE, but the individual conductor who has the vision, the ability and experience to know how to actualise that vision and transform the knowing into being (Kozma, 1995).

The work of Dreyfus and Dreyfus is invaluable for its insights to clinical practice (Kinchen & Cabot, 2010; Lyon, 2015), and of the role experience plays in the development of tacit knowledge (Eraut, 2005). With a focus upon theoretical and rule-driven 'knowing that', rather than experiential 'knowing how', the work of Dreyfus and Dreyfus (1986) serves to challenge the theories of the time (Woolery, 1990; Eraut, 1994). This model is however in turn challenged as Dall'Alba and Sandberg (2006) present a 2D model of development, aimed to create a different insight to skill acquisition. This 2D model whilst explained in brief, creates a background upon which to explore practice within CE as more than either skill acquisition, or embodiment of that skill.

Kinchin, Cabot and Hay (2008) and Kinchin and Cabot (2010) also recognise that whilst learning is acknowledged, there is little or no comprehension within the Dreyfus and Dreyfus (1986) model of how learning takes place. A gap is perceived to exist between the tacit nature of the knowledge gained, and the means by which it can be made explicit (Kinchin, Cabot & Hay, 2008). Making the tacit explicit is a necessary process in the validation of expertise, and so Kinchin, Cabot and Hay (2008) create a new perspective on the development of expertise. Recognising the power of visualisation, the authors use the tool of concept mapping to represent their understanding of expert development.

The works of Kinchin, Cabot and Hay (2008) and Kinchin and Cabot (2010), are relevant to this study for their work with teachers. Not only do their models expand comprehension of the multi-complex nature of expertise, they also raise awareness of a lack of confidence within teaching as a profession. By expanding understanding of the ways in which the tacit processes involved in the development of expertise can be made explicit, it may be possible to increase awareness and develop professional confidence. Whilst Kinchin, Cabot & Hay (2008) do not explicitly set out to

develop Dall'Alba and Sandberg's (2006) 2D model, they reasonably recognise that Dall'Alba and Sandberg (2006) have continued to develop understanding of the interaction between the individual, and acquisition of skill. The application of a visual tool, and development of an explicit model of understanding (Dall'Alba & Sandberg, 2006) creates opportunity to consider ways in which the tacit can be made explicit. It also creates opportunity to consider ways in which analysis of expert practice can be synthesised, and theory developed further. These works are discussed in greater detail below in the context of intuition. As comprehension of the complexity of expertise expands, consideration of intuition as similar, but significantly different to tacit knowledge, is explored.

2.5.2. Intuition:

Expertise, as a holistic, integrated approach to practice, involves the acquisition of knowledge, and intuition. These in turn impact professional behaviours (Kinchin & Cobot, 2010). Within clinical nursing, intuition is perceived to be a valid means by which knowledge and learning are developed (Smith, Thurkettle & Dela Cruz, 2004). Expertise and intuition, both perceived to be products of experience (Hardy, Titchen, Manley & McCormack, 2006; Dreyfus & Dreyfus,

1986; Effken, 2001), cannot however be defined by it. Intuition is linked to experiential learning, and associated with subconscious, perceptual development. Due to its implicit nature, intuition is considered by some to be synonymous with tacit knowledge, but not reflective practice (Herbig, Bussing & Ewart, 2001). In this context, intuition is perceived less favourably than tacit knowledge (Effken, 2001). Others however perceive intuition to involve cognitive processing and reflection (Lyneham, Parkinson & Denholm, 2009). In spite of these conflicting perspectives, intuition is perceived to link the professional with the personal by enabling immersion of the interpersonal connections with the professional role (Altmann, 2007).

Intuition as "an observable, lawful phenomenon that is measurable, potentially teachable" (Effken, 2001, p. 252), is considered a process in which the perceiver selects and synthesises relevant stimuli. To this end, Effken (2001), proposes an ecological methodology in which experientially the expert develops a hierarchy of sensory processing, enabling information to be prioritised. In this, a process of flexible adaptation is created, where intuition as an expert skill can be taught and learned. As intuition is gained not only from experience but also from the individual's ability to

respond to that experience, the ability to process information gained from the environment impacts behaviour.

Consequently, anything that increases perceptual, experiential learning has the potential to develop knowledge. Recognition of the human, subjective elements of expertise as different from the computational and objective factors strengthens the understanding of both the concept of expertise and the factors that influence its development. Whilst intuition may be perceived as a purely subjective aspect of expert practice, it is also a necessary one (Effken, 2001), and deserves consideration.

The 2D model of Dall'Alba and Sandberg (2006) links to the 3D model proposed by Lyneham, Parkinson and Denholm (2009), in which intuition as an aspect of expert practice is explored. It is the blending of the professional and the personal that Lyneham, Parkinson and Denholm (2009) set out to objectify and use to further expand comprehension of expert practice. Where Dall'Alba and Sandberg (2006) develop a 2D comprehension of integration, Lyneham, Parkinson and Denholm (2009) take comprehension a stage further and create a 3D perspective on professional development. Like others before them, Lyneham, Parkinson

and Denholm (2009) develop the Dreyfus and Dreyfus stage model (1986) with a view to expanding Benner's (1984) work. Developing their earlier work further, Lyneham, Parkinson and Denholm (2009) present the development of intuition within nursing as an individualised process. The authors powerfully demonstrate the application of a mathematical approach, with a phenomenological underpinning, to aid comprehension of intuition as a central factor in the development of expertise.

Experience and learning are presented graphically, to represent both learning and the stagnation of learning. Lyneham, Parkinson and Denholm (2009) quantify the point at which expert practice is evidenced. This they describe as the moment in which the nurse acts on their intuitive thoughts and perceptions, and observes the patient in a dynamic and different way. This creates a definition of expertise as the point at which "the mind sees the body react with a physical response to a certain situation" (Lyneham, Parkinson & Denholm 2009, p. 2481). At this point intuitive practice moves from the cognitive to the embodied, a fluid state in which the nurse can trust their automatic responses (Benner, 2005). This perspective parallels that of others in which "mastery" of the skill, as flexible and accomplished, is

the point of transformation (Benner, 1984; Dumchin, 2010, Marble, 2009). In a similar way to the work presented by Kinchen and Cabot above, the work by Lyneham, Parkinson and Denholm (2009) positions expertise, and comprehension of it, as a mathematical dynamic in which time and intuition are related. Their study serves to expand comprehension of expertise as a combination of time, and of cognitive and embodied intuition. Whilst they do not consider factors in the environment that assist in the transition from experienced to expert, this model positions the development of expertise. In spite of this, the model adds depth to comprehension of professional development. Their model is one to aspire to, as it unites the conscious reflective process of learning with the subconscious and intuitive. Within the context of this study, the work of Lyneham Parkinson and Denholm (2009) gives licence to consider the mastery of practice, and the very real need for the expert to both access cognitive knowledge and also become the personal embodiment of context-specific professional knowledge and skills. This model has potential to expand comprehension of expertise as uniquely different from experienced practice. The use of reflection in this model as central to the development of expertise, supports the views of Eraut (1994) and serves to challenge the staged model of development with a focus upon automatic rather

than reflective practices. The model of Lyenham Parkinson and Denholm (2009) quantifies professional development whilst it also aims to explain the "mystery" of expertise (Aydelotte, 1984 p. v). As such, awareness of intuition as a process in which experience and cognition are connected is relevant to this study. Within this study, if it is possible to both quantify and qualify perceptions of expertise, then it may be possible to create an understanding of expertise that is both tangible and magical, both professional and personal.

2.6. The Expert as Personal:

The expert within person-centred professions is perceived to blend the personal with the professional (Alvarez & Anderson-Ketchmark, 2011). It is the teacher as pedagogue, rather than the curriculum, that is considered to have the greatest impact on students' learning (Hattie, 2003). The expert demonstrates respectful team working and communication, is able to organise and prioritise (Patel, Glaser & Arocha, 2000). In the context of the work by Lyneham, Parkinson & Denholm (2009), the expert is also perceived to respond to situations holistically (Bauman, 2006). In person-centred professions, it is the expert's potential to impact upon the aesthetics of practice, which are considered significant (Collins & Evans, 2009). Perceived to

possess "…talent, knowledge, enthusiasm, preciseness and perseverance…" (Dorgo, 2009, p. 17) the expert is considered as such only when they are able to take risks and perceive themselves as catalysts for change (Hardy, Titchen, Manley & McCormack, 2006). Expertise is associated with knowledge application, and the ability to use personality and life experiences to interpret and utilise professional knowledge, to support learning in a non-judgemental manner (Dorgo, 2009).

The expert thinks strategically and sees the 'whole' in terms of their own role, and its impact upon the relationship with the service user (Benner, 1984; Dorgo, 2009; Hattie, 2003; King et al., 2007). As such, the utility of experience goes beyond the practical development of skill, to include the development of personal knowledge evidence in the quality of the interpersonal relationships. This personal knowledge requires experience, and is perceived to play a role in professional development (Altmann, 2007). Expertise is therefore dependent upon a theory-practice link, as well as a personal-professional one (Altmann, 2007).

2.6.1. Desire to be Expert:

Implicit within a holistic approach to expertise is consideration of the attributes of the expert. If it is possible to identify associated characteristics and behaviours of the expert, then it may be possible to aspire to them (Hattie, 2003). The need to understand the experts' knowledge of 'how to' demands an understanding of the strategies they employ by linking theory to practice (King et al., 2007). A meta-cognitive knowledge-base enables the expert to engage in a more complex dynamic that creates opportunity to share power and set common goals. Expertise and knowledge go hand in hand, and with it, the power to enable and effect change in the service user (King et al., 2007).

A desire to develop, to respond to and seek out opportunity for professional development (Eraut, 2005) is an essential part of expertise. Implicit in this, is the belief that all professionals have the potential to become expert should they wish to do so. In this sense, expertise should perhaps be everyone's goal (Baumann, 2006), however neither the aspiration, nor the achievement of expertise is guaranteed (Altmann, 2007; Lyon, 2015). This perception has relevance here however. If as a conductor I believe that learning is lifelong (Sutton, 2006), then I feel that I should also believe

that all conductors have potential to become expert. It is therefore relevant to consider the factors that influence this achievement, for example, the conductor's desire, and capacity to critically analyse the impact of their actions (Eraut, 2005). Development beyond what is 'competent' demands an ability to move away from the rules, towards a greater understanding of the whole, and the larger social, professional, personal context (Eraut, 1994). This requires attributes other than cognitive ability, such as "talent" (Dreyfus & Dreyfus, 1986, p. 35) and a desire to learn.

2.6.2. Expertise as Holistic:

Reference to a more holistic approach to professional development is perhaps well positioned against subsequent work of Dreyfus (2004), in which the need for emotional involvement is considered an essential part of the process of change from novice to competent and beyond. This fits with Kelly's Theory of Personal Constructs, in which emotion, cognition and action are perceived holistically, rather than fragmented parts (Marsden & Littler, 2000). Consideration of expertise as a holistic concept therefore fits theoretically with CE as a holistic approach to working with individuals with neuromotor disorders (Szogeczki, 2017). CE cannot be divided into methodological parts, in the same way that "a

dysfunctional person cannot be reduced into functions and knowledge" (Hári, 2001, p. 188). Position this with Hári's (2001) perception of Petö, as the founder of CE, personifying his theory, then it is fair to consider the expert conductor as holistic in nature and practice, where personal and professional combine.

2.7. The Expert in a Context:

With a greater understanding of expertise, and the factors that influence skill acquisition, it is relevant to consider the ways in which expertise is researched. Exploration of expert knowledge and practice is positioned against the novice (Kinchin, Cabot & Hay, 2008), and the experienced (Eraut, 2005; Hattie, 2003; Wainwright, Shepard, Harman and Stephens; 2011). Concerned by the impact of automation upon professional development (Eraut, 1993), Eraut (2005) explores the behaviours of the mid-experienced professional, and expands understanding of the expert as a learner, different from that of the novice. Where Kinchin, Cabot and Hay (2008) explore the cognitive ways in which the expert learns, Eraut (2005) recognises the role of experience in development. In particular, Eraut (2005) is concerned with the expert's ability to continue learning consciously rather than responding intuitively or automatically without critical

analysis. In this editorial piece, Eraut (2005) reflects upon the socio-political development of expertise. In particular his concern relates to the need for professions to achieve their person-centred purpose, whilst also ensuring that individual practitioners are supported to develop both professional knowledge and leadership roles. In particular he broadens perspectives and positions expertise clearly within the social context. This piece, although reflective in nature, serves this study well. With a focus upon both the idiographic and the nomothetic, it is possible to position expertise in a wider context, and give consideration to the social factors that are perceived to influence its development.

In an exploration of the potential impact teachers can have upon children's learning, Hattie (2003) broadens insight of expertise as he searches to understand excellence in teaching. Rather than compare the expert with the novice, he, like Eraut (2005), evaluates the activities of the experienced teacher as a comparator, and expands comprehension of expertise, within the socio-political context. Whilst Eraut (2005) recognises the need for expertise at both idiographic and nomothetic levels, Hattie (2003) highlights the teacher as the significant influence upon learning. It is this focus upon the professional that

resonates with this study. Hattie (2003) recognises that it is the teacher's ability to apply their knowledge that makes the difference, not the rules, rewards or punishments. Hattie (2003) recognises the teacher as the transformative resource. Similarly within CE it is the conductor who is perceived to be the central figure for change (Kozma, 1995).

Hattie (2003) is motivated to explore expertise within teaching with a view to improving practice and developing professional status. His extensive literature review, and complex assessment of expert and experienced teachers, highlights the factors that differentiate the expert from the experienced teacher. Triangulated by observations and interviews, with both teachers and students, Hattie (2003) highlights the need for passion, knowledge and application. He concludes that teaching needs to reward excellence. This holds significance for the individual teacher, the student and the profession as a whole. Hattie strongly positions his findings to support the development of professional confidence and acumen. This study holds significance here in that it highlights inherent weaknesses within person-centred professions. Comparing teaching unfavourably to other professions (such as law), Hattie highlights the need not only to reward excellence, but also to define what expertise

means to the professionals themselves. In this way the profession, and the professionals within in it, own its development, rather than being influenced by others external to it. If it is possible to construct an understanding of expertise, generated by conductors, for conductors, then it may also be possible to increase ownership of that development, with positive implications for the profession at both idiographic and nomothetic levels.

In a bid to gain understanding of professional problem-solving abilities, Wainwright, Shepard, Harman and Stephens (2011) compare the novice therapist with the experienced, rather than the expert. This article forms part of a larger study, and is preceded by their earlier work (Wainwright, Shepard, Harman & Stephens, 2010) in which reflective practice, with reference to Schön's theory, is the focus. In contrast to Hattie (2003), who does not refer to staged-models of development, Wainwright, Shepard, Harman and Stephens (2011) refer to a three-stage, context-specific model, in which the medical student is compared with the experienced clinician. Rather than define expertise however, somewhat confusingly Wainwright, Shepard, Harman and Stephens (2011) use the terms experienced and expert interchangeably. This challenges comprehension of the aims

and findings of their study. Like Hattie (2003) however, Wainwright, Shepard, Harman and Stephens (2011) do reflect that whilst skill level may be similar, cognitive processing between levels of competence is different. For example, they find that the experienced practitioner is more able to observe and interact with the patient at a holistic level. In this way the moral argument for exploration and understanding of professional expertise is further strengthened. Wainwright, Shepard, Harman and Stephens (2011) document the process of mixed-methods analysis, and demonstrate how their research has expanded understanding of the role experience plays in clinical decision-making. There is evidence of reflexivity, and recognition that whilst the findings support further exploration, they are not generalisable. With recognition of the need for both personal and professional experiences, in particular the relevance of role models in the development of confidence and motivation to learn, the work by Wainwright, Shepard, Harman and Stephens (2011) has relevance to this study.

In this overview of expert practice, the ways in which expertise is perceived and the factors that influence its development are outlined. Consideration is given to the

subconscious processes of learning, and the potential benefits and difficulties this creates for the learner as an individual, and the profession as a whole. Some consideration is given to models of skill acquisition, and the ways in which comprehension of these processes is understood. Expertise is perceived as a process of embodiment in which the individual learner develops as a consequence of their past experiences, present learning opportunities, and ability to become one with their professional environment. This leads to consideration of the problem that this study aims to address.

2.9. The Heuristic Nature of the Problem:

> "To hit upon a problem is the first step to any discovery and indeed to any creative act" (Polanyi, 1969, p. 131).

Opportunity for exploration and research is created by Polanyi (1969), who speculates that by identifying a problem, even if the problem itself is undefined, increases the probability that solving it is possible. This he refers to as its "heuristic nature… possession of incipient knowledge which passionately strives to validate itself" (Polanyi, 1969, p. 132). The 'problem' that triggers this study is grounded in my perception that an explicit articulation of expertise within

Conductive Education (CE) is lacking. Absence of an understanding of expertise within the profession has potential to negatively impact professional development at both idiographic and nomothetic levels (Hattie, 2003). Without an explicit comprehension of expertise within the profession, it is impossible for the individual conductor to develop towards expertise in a cognitive, structured fashion that explicitly fits with the needs of the profession in the 21st century. Whilst a process of CPD exists, there is no ultimate goal or measure of success for conductors working in the UK to develop towards. Whilst this may impact individual practice, absence of these factors is also perceived to negatively impact professional development and status, as well as the profession's moral obligation to service users (Eraut, 1993; 2005; Hattie, 2003). Exploration of expertise within person-centred professions has potential to raise standards of practice and self-esteem. It also has potential to influence training at both undergraduate and postgraduate levels (Woolery, 1990).

The need for academic development within CE is well documented (Sutton, 1997). Whilst research and evaluation of CE itself is present (Brittle et al., 2008; Brown, 2006), there are no UK-based studies in which expertise or

perceptions of it within the profession are explored. Neither is there a definition of expert practice; what it consists of, looks like or how it can be aspired to. This problem is not unique to CE, and is identified within other person-centred professions (Borell, Espwall, Pryce & Brenner, 2003). Whilst it is possible to position CE in the context of these related professions, it is time for conductors to have their own understanding of expertise, and to consider for themselves the direction of professional development. There is no definition of expert practice, role modelling is not highlighted and there is no system or recognition of good or best practice.

Expertise is linked with an ability to learn, understand and cognitively problem solve (Glaser, 1985). This perception reflects Kelly's (1963) recognition of the latent power of the individual to solve their own problematic perceptions of reality. If theory has potential to shed light on a problem, by binding facts together (Brophy, Fransella & Reed, 2005), then within a psychological context it has potential to generate understanding of expertise at the human, personal level, not just the professional (Bannister, 2005). In the context of this chapter, my ultimate aim for this study is that a tool can be constructed and used by conductors to develop professionally and personally, intuitively and reflectively.

Through the use of a tool, to assist in a process of development, it is hoped that conductors, as similar to others in person-centred professions, can thereby gain confidence in their professional identity (Edwards, 1998). With these factors in mind, it is possible to explore the aims and purpose of this study.

2.9.1. The Nature of Expertise:

If a definition is considered a symbolisation (Lyneham, Parkinson & Denholm, 2009), then it is reasonable to assume that the construction of a definition of expertise is a challenge (Nelson & McGillion, 2004). A definition of expertise, however elusive in nature (Altmann, 2007; Edwards, 1998; Nelson, McGillion, 2004), has potential to impact upon the development of autonomous practice (Wainwright, Shepard, Harman & Stephens, 2011) and professional responsibility (Hattie, 2003). If conductors' perceptions of expertise are to be contextualised, a definition of expertise may be desirable, however a measure of expertise may also serve to expand understanding of expertise as both desirable and achievable. The following section positions this study in the context of other studies in which measures of expertise are constructed. This is continued in chapter 3 in which consideration of the research

method is used to gain insight into expertise and ways in which it may be measured.

2.9.2. Measuring Expertise:

Expertise as an international concept (Germain & Ruiz, 2009) is found to be measurable (Germain, 2006), with potential impact upon performance (Argote & Ingram, 2000). Expanding upon earlier work, Germain and Tejeda (2012) justify their exploration of expertise within an organisational context, upon the need to influence both development and performance. Whilst they recognise that the measurement of perceptions is both rare and difficult, Germain and Tejeda (2012) consider the need to construct a quantitative measure of perceptions of expertise. Without this, a generic measure of expertise is considered useless (Germain & Tejeda, 2012). Aiming to create a generic assessment and measurement tool with relevance to both experts and non-experts, Germain and Tejeda (2012) explore expertise and the factors associated with it. Whilst their measure assists in furthering understanding of expertise, the limitations of their study with respect to validity and reliability highlight the many challenges presented in the construction of such a tool.

In the context of this study, the earlier work of Germain and Ruiz (2009) supports the view that experts can be trained, and that there is a need for both qualitative and quantitative analysis of perceptions of expertise. This article is relevant for its insights into expertise, taking perspectives beyond the UK, and into a different professional context. By recognising the need for a mixed-methods approach, guidance for this study is explicit, whilst in contrast, the broad aims of the study by Germain and Ruiz (2009) limit the idiographic and nomothetic detail. Another limitation in Germain & Ruiz's (2009) study is the inclusion of perceived experts, rather than a mix of population. With no definition of expertise within CE, an absence of perceived experts could be considered an advantage to any measurement tool.

In contrast, King et al. (2008) engage 75 therapists in their study to measure expertise. Where Germain and Tejeda (2012) look to determine a generic measure of expertise, King et al. (2008) aim to measure expertise within a specific medical context. Rather than use perceived experts, they gain a multi-complex perspective of expertise that includes self, peer and service user perspectives of attributes, actions and esteem. This study, together with that by King et al., (2007) and King, Jackson, Gallagher, Wainwright and Lindsay

(2009) serves to expand comprehension of expertise beyond measurement to the impact of factors that influence practice such as the range and depth of experience, the practitioner's motivation for development and the significance of modelling expert behaviours. Subsequent work by King et al. (2014) continues to explore insight into expertise and the factors that influence its development. For this reason, whilst not a measure as such, the work by King et al., (2007, 2009, 2014) serves to support justification of this study and validate its purpose to improve practice. Whilst a quantitative measure of expertise may be one way to improve practice, the studies mentioned above indicate that a qualitative measure of behaviours, attitudes and peer evaluation may also positively impact practice and the service user experience.

Other studies, in which the chosen methodological tools are utilised with respect to gaining insight to perceptions of expertise and the identification of items for inclusion in a measurement tool, are explored in chapter 3.

2.10. Defining the Aims of this Study:

Expertise as a concept has developed from the mid-1950s into the 21st century. Whilst research into what constitutes it,

how it is perceived and how it is achieved remains limited; it presents as a topic for further investigation. There are few research studies in which perceptions of expertise are explored (Germain, 2009), however expertise itself is identified in person-centred professions, and valued as a significant aspect of professional development. Commonality amongst person-centred professions suggests expert practice includes a mix of knowledge, skill and personal application (Eraut, 2004; Brody & Hada, 2015).

Experience and expertise are related but not linearly (Eraut,1993). It is possible to consider that conductors' perceptions of expertise will reflect these findings. However CE, as a strengths-based (Szogeczki, 2017), rather than a deficit model approach to working with individuals with motor disorders may generate different perceptions of expertise. It therefore seems both appropriate and necessary to explore conductors' perceptions of expertise, as similar to, but uniquely different from, other person-centred professions. It is also relevant to explore the ways in which conductors construct these perceptions, and the factors that may influence their construing. It is evidenced that it is possible to construct a measure of expertise, however it is less clear how useful this is at a generic level. Therefore, exploration of

idiographic perceptions of expertise, with a view to constructing a context-specific measurement of expertise with relevance at both idiographic and nomothetic levels, carries some weight. With these thoughts in mind, the structure of this study is centred around the following ideas.

In the absence of a definition of expertise within CE, if a measure of expertise is to be constructed, exploration of conductors' perceptions of expertise is necessary, as identified by Germain and Tejeda (2012). In order to construct a meaningful measure, these perceptions, and the factors that influence their development, need to be considered in a context. In order to create a measure of expertise, once perceptions at the idiographic level are identified, it is relevant to construct a thematic synthesis of collective meaning. From this it is possible to determine commonality amongst conductors' perceptions of expertise. Utilisation of these themes then has the potential to influence the development of a measure of expertise. If this is possible, application of this measure as a tool to facilitate professional development within CE may then be validated.

Awareness of expertise and the factors that may influence its development has potential to influence the training and

education (Fetzer, 2003) of conductors. If a defined process of professional development within nursing impacts at both idiographic and nomothetic levels (Sandehang & Tutik, 2017), then similarly a clearer view of expertise within CE may also impact the profession. This has potential to positively impact CE as a minor profession, and reinforce the moral obligation of CE as a person-centred profession to deliver expert practice to those requesting help from its professionals.

András Petö describes CE as both complex and dynamic, (Grundtvig, 2012). In this context the individual is defined as a complex learner, active in their own development, whilst constantly in a dynamic process of change (Szogeczki, 2017). As a result this study should be positioned within a paradigm that reflects the interactive nature of the profession. There is a need to position the professional as both dynamic and responsive, constantly in search of new constructions and theoretical insights (Szogeczki, 2017), as the context for practice changes.

Justification for this study is that it does not serve to doubt current practice, rather that if there is a clearer definition of expertise, then the benefits to all may be increased. As a

journey of professional and personal development, this study is grounded in the belief that "the questions we ask do matter", (Charmaz, 2017, p. 34). Explicitly, the aims of this study are focused upon the following questions:

1. How do conductors construct their perceptions of professional expertise?
2. What are the common priorities associated with the professional expertise of the conductor?
3. Is it possible to measure professional expertise?
4. Can a measure of professional expertise be used to facilitate professional development?

A first step in addressing these research questions is to determine the theoretical underpinning of the study, with its potential to influence all stages and parts of the process.

3. DEFINING A MEANS OF EXPLORATION:

"A person's brain creates a unified, internally consistent picture of his social world" (Ramachandran, 2011,p.275).

3.1. Introduction:

As seen in the previous chapter, by positioning CE and the conductor role in a wider context, it is possible to generate an understanding of expert practice as perceived by those in other person-centred professions. This chapter explores and rationalises the methodological choices made in the context of CE, and the aims of this study; to explore conductors' perceptions of expertise, as reflective of their social world, and in some way generate a measure of expertise from which a tool for professional development can develop.

In earlier chapters, time is given to explore expertise and its relevance to conductive education. Clarification of the four questions that underpin the direction of this study, serve to focus attention upon the ways and means by which these questions may be answered. Consideration of a theoretical underpinning that unites these parts is important. Utilisation of an approach that reflects the constructivist (Grundtvig, 2012), strengths based, holistic nature of CE (Szogeczki,

2017), serves to unite this study and demonstrate that the whole is bigger than the sum of its parts. In this chapter I consider the choices I make in relation to the methodological position taken.

In order to create a trustworthy line of inquiry (Horsburgh, 2003), it is essential that I am clear about the following; (i) my position with respect to my ontological perspective of the truth and the impact of this epistemologically (Probst, 2015), (ii) my relationship with the conductors as research participants (Pillow, 2003), (iii) my positioning as I analyse and synthesise the data (Holmes, 2010).

My choice to utilise a reflexive process of research demands that I recognise the impact of my presence within the study, achieved in this case by writing in the first person (Horsburgh, 2003; Pillow, 2003). Articulation of my role in this study has the potential to increase its credibility (Darawsheh, 2014), whilst also recognising that it may become less tidy in places (Pillow, 2003). A process of reflexivity is important to those utilising Personal Construct Theory (Butt, 2004), and so my aim in this chapter, as with this study, is to interject myself in the text at points where I can consciously see the impact of my thoughts and feelings

upon my actions. Consequently, it may be possible to demonstrate self-awareness of the impact of the social upon the personal (Davies, 2012), and to "emphasise not what we know, but how we think we know" (Visweswaran, 1994, p. 80). In this way it is possible to represent the whole, and myself as part of it (Rose & Webb, 1998). At the outset of this study I have less than five years' experience as a conductor working in the UK. I do not perceive myself more knowledgeable, or in a more privileged position than the conductors I interview. Rather I feel indebted to them, and respect their participation. I therefore require a paradigm that enables me to engage with the conductors, on equal, but respectful terms. A paradigm that has potential to perceive the learner as active, and reflect the dynamic nature of CE, makes it possible to undertake the study holistically, both in principle and reality.

3.2. Identifying the Paradigm:

A paradigm is a set of beliefs that relate to the comprehension of knowledge and reality (Guba & Lincoln, 1994). This impacts upon all parts and stages of the research study (Houghton, Hunter & Meskell, 2012; Punch, 2009), and influences and reflects the researcher's social, epistemological and ontological viewpoints (Klapper, 2011).

The paradigm enables unification of the research process, and provides the link between the questions, the method (Houghton, Hunter & Meskell, 2012), and justification of the choices made in relation to their research application (Kemp, 2012). In order to achieve this unification, it is essential to specify knowledge and how I understand it to be created (Kemp, 2012). This has implications not only for how the study proceeds, but also in how the study is evaluated at its conclusion against the initial aims.

With eclectic theoretical and philosophical influences, ranging from Pestalozzi to Vygotsky and Csikszentmihalyi (Grundtvig, 2012), CE lends itself to a paradigm in which discovery can be dynamic, interactive and progressive. A research paradigm which can fit with and generate a greater understanding of conductors' perceptions of expertise within the profession is essential.

Considered an intellectual advantage when flexible, the paradigm chosen reflects the researcher's focus and identity (Guba, 1990). By determining the answer to three specific questions it is possible to determine the most appropriate paradigm to enable the study, the researcher and the methods to exist in a dynamic relationship. These questions

relate to perceptions of truth and how the researcher interprets them, in particular they relate to the researcher's:

- Ontological position; what is reality?
- Epistemological position; what is the nature of the relationship between the researcher and the researched in which differentiation between knowledge and internal beliefs is discussed?
- Methodological position; how do the ontological and epistemological positions impact the application of the research itself, and so influence the advancement of knowledge? (Guba, 1990; Guba & Lincoln, 1994; Kemp, 2012; Law, Ireland & Hussain, 2007).

Four paradigms, appropriate to exploratory, qualitative study (Guba & Lincoln, 1994) are considered here; positivist, post-positivist, critical theory and constructivist paradigms (Punch, 2009; Guba, 1990).

3.2.1. Positivism:

With its focus upon a realist ontology (Lee, 2012), and a desire for the truth (Guba & Lincoln, 1994), positivism is a paradigm in which reality is context-free and generalizable. The epistemological position of the positivist is both distant

and objective. The researcher searches for answers without apparent bias or influence upon the findings, and defines replicable findings as absolute (Guba & Lincoln, 1994). Positivism requires a level of objectivity (Guba, 1990) which does not fit with my aims for this study. Rather, with a focus upon discovery, as opposed to hypothesis, the aim of this research is less upon determining an absolute truth and more about determining an individual truth, relevant at a nomothetic level. The aim is to determine subjective, context-specific information.

3.2.2: Post-positivism:

Within post-positivist and critical theory paradigms, reality exists, but influenced by the laws of nature, remains distant, and disconnected from the individual (Guba, 1990). Post-positivism, gives way to both quantitative and qualitative research methods (Houghton, Hunter & Meskell, 2012). Whilst the positivist position assumes complete objectivity, the post-positivist accepts the challenge of its dualist position, whilst attempting to maintain a level of objectivity (Guba & Lincoln, 1994). This is achieved by demanding the widest range of investigation; the utility of both quantitative and qualitative methods and a rigid structure of triangulation

(Guba & Lincoln, 1994). For this reason, a post-positivist approach is initially considered. If conductors' perceptions are to facilitate greater comprehension of their process of meaning making, a qualitative narrative is considered essential. If however a measurement of understanding is to be generated, then a quantitative approach is also perceived a requirement. The post-positivists' central position however remains realist (Guba, 1990). Within this paradigm, the individual is perceived to be powerless (Kelly, 1963). This latter point moves the paradigm choice to one that acknowledges research as a dynamic process. Not only is the presence of the researcher relevant, the impact of the research upon both the researcher and the researched is also significant. In keeping with CE as a pedagogy in which the learner is active (Brown, 2006), I perceive it to be essential to determine a position from which both I as the researcher, and the conductor as the research participant, can be empowered.

My personal journey is reflected in this study. Rather than consider ourselves as passive, I prefer to view the conductors, and myself as potential transformers; powerful to think and interact within our social context, thereby

creating opportunity for change. These considerations discount both positivist and post-positivist paradigms.

3.2.3: Critical Theory:

From a critical theory perspective, reality remains objective. There is however an element of subjectivity in the relationship between the researcher and the research, and it is this subjective nature of enquiry that dominates (Guba, 1990; Guba & Lincoln, 1994). Application of a critical theory paradigm has potential to position a study within a political framework, and focus upon the social and historical contexts (Guba, 1990). My focus, to determine perceptions of expertise within CE, as a person-centred profession, gives consideration to aspects of related historical and political agendas. Whilst my aim is to influence the idiographic, this is not my only concern. In order to reach the point where the findings of this study can influence practice and perceptions of professional development in a wider context, I require a paradigm that can give insight into the nomothetic, to the wider professional issues associated with expertise. The political relevance of this study, although of interest, does not further my comprehension of individual conductors'

construing, and so largely application of critical theory, as a paradigm, is not relevant to my aims.

Grounded Theory (GT), as a means by which themes are constructed, and data analysed, does however serve my aims. Sitting within a critical theory paradigm, GT is perceived to enable comprehension of the world being studied, as separate from the researcher. For an insider-researcher, this does not fit with the aims of this study. Whilst critical theory as a paradigm is rejected, constructivist GT which sits within the constructivist, interpretivist paradigm (Charmaz, 2006) is utilised during the analysis stage of this study. Where the critical theorist looks to transform, the constructivist considers idiographic and nomothetic construing, raising consciousness as well as cognitive transformation (Guba, 1990).

3.2.4. Constructivism:

The terms constructivist and constructionist theories are used interchangeably (Henson, 2003; Klapper, 2011; Raskin, 2015; Lee, 2012; Clayson, 2013), with others recognising a separate identity for each (Wink & Wink, 2004). Constructivism, as a meta-theory (MacKay, 1997), or multi-layered collection of theories, is itself defined as an

epistemology (Bauer & Perciful, 2009). In contrast to essentialism and objectivism, in which knowledge is gained objectively (MacKay, 1997), constructs, and the meanings they represent, are considered context-specific (MacKay, 1997; Bauer & Perciful, 2009).

Constructionist methodology as a unified comprehension of both realities, being neither ontology nor epistemology, is considered non-dualist (Klapper, 2011). At its heart is a focus upon relationships and people, and a search for truth, evidenced in behaviours triggered by interaction with the environment, articulated as a personal reality (Guba, 1990).

Constructivism, originating from Europe in the 1930s, associated with the works of Kant and Piaget (Guterman & Rudes, 2008), is considered to have preceded constructionism (Wink & Putney, 2002; Guterman & Rudes, 2008), attributed to the work of Vygotsky (Wink & Putney, 2002). Although both constructionism and constructivism involve social interaction (Guba, 1990), constructivism is considered a biological, cognitive process of meaning making, where constructionism impacts ideas as a consequence of conversation (Guterman & Rudes, 2008, Klapper, 2011; Wink & Wink, 2004).

The work of Vygotsky, as a social constructionist, (Wink & Wink, 2004), focuses upon the use of language and thought (Wink & Putney, 2002). As such, the work of Vygotsky is central to CE practice and pedagogy (Grundtvig, 2012), in particular its relevance to the impact of social collaboration upon knowledge making (Wink & Wink, 2004). With this in mind a social constructionist approach may appear relevant to this study. Within social constructionism, however, there is a perceived absence of the self (Burr, 2015). With my aim to gain insight to individual construing, this does not appear to be a rational choice. I want to explore the nature of conductors' construing, and gain insight into the ways and means by which conductors' perceptions of expertise are both idiosyncratic and generalizable. Whilst I perceive the conductor as having potential to change, as a consequence of social collaboration (Wink & Putney, 2002), I feel it is essential to synthesise a baseline of understanding of expertise before exploration of the social network and its influence upon development of expertise takes place.

In contrast to critical realist theory in which reality exists separate to human cognition (Klapper, 2011), within relativist (Guba & Lincoln, 1994), constructivist thinking, reality is considered pluralist, contextual and person-specific

(Guba, 1990). Arguing against the positivist perspective of an absolute, objective truth, the constructivist defines knowledge as existing within the mind of the individual; a consequence of interactions with the external world, and experiences elicited from them (Yilmaz, 2008). This relativist position holds meaning for the individual (Guba, 1990), challenging the essentialist perspective in which context is irrelevant (Bauer & Perciful, 2009), and truth absolute. Within a constructivist paradigm, truth is never absolute. It is the individual who creates the knowledge and understanding (Guba, 1990), and as such brings with them interpretations and misinterpretations (Dumchin, 2009). Constructions are considered changeable, as are the realities they represent (Guba & Lincoln, 1994), which may conflict and change over time (Guba, 1990; Lyons, 1999).

The epistemological position, the interaction between researcher and researched within a constructivist paradigm is considered unified, or monistic (Guba, 1990). The constructivist paradigm therefore is itself considered a construction of human interpretation (Guba & Lincoln, 1994), truth being accepted because of the argument rather than the fact. Radical constructivism, as one of several differentiations within the constructivist paradigm (Yilmaz,

2008), is attributed to the work of Von Glasersfield (Kemp, 2012). Radical constructivism focuses upon the fit of the individuals' experience to their knowledge base, with knowledge being constrained, rather than constructed by the experience (Kemp, 2012). With a focus upon exploration, rather than analysis of the impact of construing, the aims of this study however do not appear to be met by the radical constructivist approach.

These examples reflect the diversity of theorising within the constructivist paradigm, and the reality that constructivist theory can be considered a psychology of the future (Chiari & Nuzzo, 1993; Mischel, 1980). A constructivist paradigm therefore appears to fit many of my aims for this study. From an ontological perspective, reality exists, and equally is what the person says it is, existing within them. A constructivist paradigm also sits comfortably with CE, in which the learner is perceived to be active, rather than a passive victim (Brown, 2006). The notion of the individual as interactive within their environment, constructing meaning as they interact, experientially (Gould, 2000), is both plausible and fits with the context-specific aim of this study.

As part of the need to be active within the study itself, it is relevant to consider researcher reflexivity an essential part of a constructivist approach (Charmaz, 2006). The role of the insider-researcher, in which shared experiences play a significant part, fits well within a constructivist paradigm. As a conductor, exploring the perceptions of conductors working in the UK, it is both relevant and appropriate to consider the relationship with research participants as equal (Mulhall, 2002). This paradigm appears to be worth further consideration. In particular there is a need to consider the process of individual meaning making, and so a constructivist theory with this intent is sought. Whilst there may be agreement that constructivism enables understanding of personal meaning making (Raskin, 2002), why or how this happens appears open for debate. Kelly's process of construing serves to position, and comprehend behaviour within a context, rather than describe it (Butt, 2004). For this reason, a constructivist paradigm appears relevant and appropriate to the aims of this study. With awareness of a cognitively constructed, rather than factual truth, Personal Construct Theory (Kelly, 1963), in which the participant is the inquisitive partner actively involved in the research process (Klapper, 2016), is considered constructivist, rather

than constructionist (Bauer & Perciful, 2009; Fransella & Neimeyer, 2005) and so fits well with the aims of this study.

3.3. Personal Construct Theory:

Personal Construct Theory (PCT), the work of George Kelly (1963), sits within the constructivist paradigm (Kuipers & Grice, 2009a). Sitting on the edges of mainstream thinking, alongside the social constructionist paradigm (Klapper, 2011), PCT is the psychological theory underpinning Personal Construct Psychology (PCP) (Rozenszajin & Yarden, 2015), and rejects the essentialist, reductionist position (Burr, 2015). This psychological theory (Llewelyn, 2015), in which the human relationship within the social context is considered pivotal (Klapper, 2016), facilitates insight into individuals' discriminating, or construing of their reality (Lambert, Kirksey, Hill-Carlson & McCarthy, 1997; Walker & Winter, 2007). For Kelly (1963) the individual exhibits behaviours that are not language-based, and so a theory that can support their exploration is essential. PCT creates understanding of the individual beyond their thinking to include their personal, subjective interpretation of their reality (Bezzi, 1998).

Kelly (1963) appears to recognise that aspects of his theory lend themselves to positivism, accepting that the process of construing implies a degree of rationalism. However he also accepts that he challenges "traditional *realism*" (Kelly, 1963, p. 17), perceiving the individual to play an active, rather than passive role in their reality. Written in the mid 20th century he pitches his theory of personality within a "*rationalistic*" perspective (Kelly, 1963, p. 17), based upon his perception that experimentation and a process of meaning making construe reality. Being neither dualistic nor pluralistic, but somewhere in between, Kelly considers PCT monistic (Kelly, 1963). This is argued against by Butt (2004), who feels that Kelly is in fact less confident within this philosophical context and so uses phraseology he is less familiar with in order to sound more convincing. This to some extent aids a more simplistic understanding of construing as a holistic combination of thought, action and cognition, rather than cognitive processing alone (Kelly, 1963; Marsden & Littler, 2000). In this way PCT links well to the underpinning principle of CE as a holistic approach to working with children and adults (Szogeczki, 2017).

Kelly assumes that the world exists but that the individual's perception of it has the potential to change over time as the

two processes interact. In this way it is possible for the individual to change his reality (Kelly, 1963). In contrast to realist ontology in which nature is perceived to control the individual (Guba, 1990), Kelly believes that there is potential to gain control over this reality. Arguing against the perspective of psychological thinking at the time (Mischel, 1980) that positioned the individual as a passive recipient, a victim of their circumstance, instead, Kelly perceives them as scientists (Raskin, 2001) or as

> ….adventurers, capable of pushing the boundaries of their lives as they experiment with alternative interpretations of their changing worlds in an attempt to increase predictability (Walker & Winter, 2007, p. 454).

Kelly positions his theory broadly, describing it as a combination of philosophy and psychology (Kelly, 1963). He appears to consider the individual's behaviour as representative of the world they perceive, whilst their philosophical stance reflects their individual perspective. With potential to unite both emotion and cognition, PCT is considered a meta-theory (MacKay, 1997), one in which a motivation-based, deterministic theory is rejected, in preference to one in which man is perceived to be an

autonomous, anti-realist being. Whilst Personal Construct Psychology may propose that the individual is a blank slate (Burr, 2015), and acts independently (Klapper, 2011), it is focused upon understanding the meanings the individual attaches to specific social and historical events. Language is used to determine in explicit terms the meaning that a specific event or role has to that individual by definition of what it means, and also what it does not mean to them. In this way meaning making is individual and contextual, relating to specific events (Borell, Espwall, Pryce & Brenner, 2003; Burr, King & Butt, 2014; Kelly, 1963). The meanings attached to these events are referred to as constructs. Constructs are considered to be bipolar, hierarchical and inter-connected (Raskin, 2002), enabling events to be prioritised and ordered (Mayo, 2004).

3.3.1.: Constructs and Elements:

Kelly (1963) perceives each person to be their own theorist (Kelly, 1963). They create a perception of their world based upon their experiences enabling them to anticipate, predict and control their life (Kelly, 1963). Constructs, developed from experiences and their associated memories (Boeree, 2011), are abstracted, personalised words or phrases that reflect individual meaning within a context (Kelly, 1963).

Rather than the external stimuli being significant, Kelly understands that it is the way in which the stimuli is interpreted by the individual that makes it so (Mischel, 1980). Kelly (1963) considers unconscious actions to be part of a system of construing in which the individual potentially can gain control. This requires the unconscious to become conscious, the tacit to become explicit. Bannister (2005) recognises the power held within Kelly's theory; not only in understanding the individual, but in enabling them to actualise a solution to daily living. This is relevant here, in the sense that my aim is not only to identify individual construing, and nomothetic understanding, but also a means by which conductors can for themselves find solutions to their own professional development.

The concrete realities defined by the constructs are known as elements. What is defined by construing, is the abstracted element (Clayson, 2013), to which the construct applies meaning. In this way elements, and the constructs which describe them, are related, and the social environment and associated experiences gain significance (Wilson & Retsas, 1997).

3.3.2. Constructive Alternativism:

Constructs, the concrete aspect of Kelly's theory (1963), define the similarities and differences between moments of time, that is constructs reflect the perceived reality for the individual at that moment, within a specific context. Constructive alternativism permits differences to exist between individuals within the same context, strengthening ideas, supporting individualistic interpretation (Klapper, 2011). Constructive alternativism, the interconnection between the individual's perceived realities, within the context of their society and the culture in which they exist and are related to (Lambert, Kirksey & McCarthy, 1997), is an ever-changing reality with an infinite number of subjective variables, or interpretations (Raskin, 2001; Burr, King & Butt, 2014). Kelly perceives the individual to both represent and interact with the environment in which they exist (Chiari & Nozzo, 1993). In this way a relationship between knowledge and reality, or a contextual, absolute truth (Lambert, Kirksey & McCarthy, 1997), develops. It is this understanding of the ability to change the construing, or perception of a given situation that Kelly perceives to give the individual control over it (Kelly, 1963). Application of Kelly's theory, with the participant as an active part of the research, has potential to

impact practice, as conductors articulate their perceptions of expertise.

3.3.3. Constructs as Bipolar:

By facilitating expression of thinking, through articulation, it is possible to consider individual perceived realities and meanings (Gengler, Howard & Zolner, 1995; Tan & Hunter, 2002) in a way that reflects their process of discrimination (Walker & Winter, 2007). Developed from experiences and their associated memories (Boeree, 2011), the language used in the construct reflects individual specificity. It is the individual's perception that is being explored, the concrete 'reality' being less about what something is, and more about the meaning attached to it by the individual (Kelly, 1963).

Constructs are multi-dimensional, having properties (Fransella, Bell & Bannister, 2004, p. 15), the most significant of which is their bipolarity. The bipolarity of constructs enables prediction because it facilitates discrimination (Walker & Winter, 2007) by defining what something is, and by default what it is not (Adams-Webber, 1992), or, how some things are similar, but different from others (Kelly, 1963). The generation of these bipolar construct pairs in Kelly's theory makes it possible for the

individual to both anticipate and predict future events (Wilson & Retsas, 1997; Raskin, 2001; Borell, Espwall, Pryce, Brenner, 2003). Constructs, as abstracted, personalised words or phrases, reflect individual, tacit meaning within the context (Kelly, 1963) defined by the elements. It is to this hidden or tacit meaning that PCT as a methodology facilitates access, enabling exploration of meaning attached to specific professional roles and skills.

3.3.4. Constructs as Hierarchical:

Constructs are not only bipolar, but are also hierarchically ordered (Kelly, 1963) according to their specificity. Constructs can be categorised as superordinate, that is referring generically, or subordinate, which are more specifically related to events (Walker & Winter, 2007). The hierarchy of constructs enables the individual to hold on to certain meanings, whilst allowing others to be changed or let go of altogether. In this way the individual can be liberated from their past (Kelly, 1963). Categorisation of constructs is of interest, with the focus more upon the process of categorising rather than the categories themselves (Gengler, Howard & Zolner, 1995), and holds relevance later in the process of analysis (chapter 5).

3.3.5. Elements and the Range of Convenience:

As identified, constructs relate to specific events and contexts. The range of convenience relates to a specific set of circumstances, events or elements, which by nature determine the boundaries of meaning articulated in the bipolar construct pairs (Kelly, 1963). Kelly describes the range of convenience as "the expanse of the real world over which a given system or theory provides useful coverage" (Kelly, 1963, p. 17). The range of convenience therefore determines a very specific context (Adams-Webber, 1987; Fransella, Bell & Bannister, 2004).

Consideration of 'self' as an element, for example, is considered to be one side of a range of convenience. Who we perceive ourselves to be to some extent is considered within the context of those around us (Walker & Winter, 2007). Kelly recognises the significance of role upon individual identity, whilst perceiving it as a choice; "…one does not ask to be seen in a role he cannot handle and he does not elaborate a role he is not ready to play" (Kelly, 1963, p. 131). In this study, consideration of the individual conductor, in the context of those around them may assist in their articulation of expertise. For instance if conductors perceive themselves to be more, or less experienced than those they

work with, they will articulate constructs that serve to discriminate themselves from others.

If as Kelly's theory suggests, we are to believe that we are a product of, and an influence upon, our environment or social context, then we need to understand ourselves within that context. If we are to set ourselves goals and challenges, we need a means by which to reflect upon our behaviours within specific contexts. Kelly recognises that by understanding our own behaviours in comparison to those around us, we can begin to understand ourselves differently. If it is possible for conductors to determine who they are in specific contexts, it may then be possible for them to reflect upon this with impact upon their professional development.

3.3.6. Significance of personal constructs:

Personal Construct Theory (PCT) has potential to be considered both useful and relevant (Walker & Winter, 2007). Within a clinical setting, PCT has potential to assist in analysis of behaviour (Fransella & Neimeyer, 2005) and a process of transformative personal understanding (Pavlovic, 2011). PCT has the potential to address the aims of this study by offering a means of exploring and gaining insight into conductors' perceptions of expertise and their individual

realities within the professional context (Fransella, 2005). These perceptions are sought with a view to both interpreting and measuring them. PCT is a reflection of the influences of the time with a focus upon use of language, role, and religion (Fransella, 2005). Considered an appropriately substantive theory (Punch, 2009), PCT has potential to challenge, and be challenged (Brophy, Fransella & Reed, 2005). Whilst Kelly's theory equally challenges ideas of science, reality and truth, Kelly writes that it is neither psychology nor philosophy. Rather it takes a philosophical approach to the "psychological observation of man" and a psychological approach to man's "philosophical outlook" (Kelly, 1963, p. 16). As such, CE as a holistic profession (Grundtvig, 2012; Szogeczki, 2017) can be considered to sit within a holistic methodology, one that recognises the significance of mind and body, emotions and spirit (Haynes, 2009). The opportunity to utilise an underpinning theory that links both psychology and philosophy therefore seems appropriate.

3.3.7. Repertory Grid Technique: Link Between PCT and Study Aims:

Expertise, as an area of professionalism, is notably poorly researched. Moreover, Personal Construct Theory (PCT) (Kelly, 1963) and the associated method, Repertory Grid

Theory (RGT), are similarly underutilised in the 21st century. As a consequence the background resources for this study are limited. One advantage of this, however, is that it widens the context and makes it possible to consider application of both PCT and RGT to explore perceptions of expertise within other professional arenas. This serves to expand understanding of the method and methodology, expertise as a professional concept, and CE in a new light. Application of RGT is considered in greater depth in chapter 4, however here, it is relevant to note the findings of others. With this in mind, consideration is given to studies in which RGT is utilised to determine characteristics of expertise, or to construct a measurement tool.

Within a health care setting Edwards (1998) exploratory study, uses opportunistic selection of seven nurses, with between two and eleven years' experience. With a focus upon the findings and synthesis of meaning, rather than the analysis, it is harder to validate or replicate, however Edwards (1998) determines 55 construct pairs, later reduced to four categories reflective of expert practice; knowledge, team building, strong leadership and patient-focused care. Reflecting upon application of the method, Edwards (1998) finds he creates too wide a range of convenience, and use of

'self' as an element is perceived to affect nurses' confidence. Kelly recognises the need for the 'self' element (Fransella, Bell & Bannister, 2004), however Edwards (1998) does not put his findings in this context. Rather he makes assumptions about characteristics of expertise in general but without substantiating them. For example, he likens intuition to automation. He concludes that expertise has characteristics that are not always context-specific and recognises that his study goes only a small way to identifying characteristics of expert A&E nurses. However his study is useful. It demonstrates application of the RGT within a comparative profession, and utility of the method in constructing a nomothetic understanding of expertise. Although he does not articulate the process in detail, he demonstrates what is possible, and concludes with findings that are relatable. Expertise is viewed through a phenomenological lens in which all nurses have the potential to become expert. This is significant, as it acknowledges that change, if desired is possible. Significantly, expertise is identified as a cognitive process that impacts upon the way in which the expert seeks opportunities for learning, but differs from those utilised by the non-expert (Eraut, 2005). It waits to be seen if conductors will also articulate their perceptions of expertise in this way. This study focuses upon conductors' perceptions

of expertise. It is exploratory by nature, and underpinned by a belief in potential to change. As central aspects of conductive practice, the work of Edwards (1998) validates the choice of method chosen.

Repertory Grid Technique (RGT) is also utilised and rationalised by Pollock (1986) within a nursing context. Highlighting the opportunity implicit within RGT to generate data without researcher influence, Pollock (1986) validates this by perceiving the RGT as an interview rather than a conversation. She notes that the interviewer must listen more, and keep focused upon the aims of the task, whilst the grid itself controls the conversation. Not only is this useful as validation of the process but also serves to influence construction and application of the RGT itself.

Pollock (1986), like Hutchinson (1998), perceives the RGT positively, identifying it as a means by which item generation for questionnaire construction is possible. The aim of Pollock's article (1986) is to demonstrate the utility of RGT as a research method, with respect to qualitative and quantitative data, however she concludes that both approaches are not necessary. Hutchinson (1998) identifies saturation to be achieved with a maximum of 25 participants,

and considers the RGT an appropriate method for exploration. From 15 participants she generated 621 responses, which gave rise to 92 constructs. Twenty-five of these were considered unique, that is there is no similarity with any other constructs. This holds relevance in chapter 7 in which the measurement tool aims to reflect both the idiographic, and the nomothetic perceptions of expertise. Unlike Pollock (1986) however, Hutchinson (1998) utilises only a quantitative method of analysis, and is perceived to be a limitation, rather than an advantage.

Whilst these studies have sought exploration within one context, Wilson & Retsas (1997) use RGT to compare three groups of nurses. With reference to both hierarchical cluster analysis and multi-dimensional scaling as a means of analysis, they conclude that nursing is context-specific, and that within different specialisms different skills and aptitudes are required. Therefore, what may be perceived as expert nursing within one context, may be different within another. With this in mind, whilst I position CE within the context of other person-centred professions, appropriate as it may be, it is also worth noting that there may be times when this is neither appropriate nor useful (Germain and Tejeda, 2012). The detailed requirements of each professional context may

mean that comparators have relevance only up to a point, and that an exploration of conductors working in the UK presents too diverse a context to have significant meaning. It waits to be seen if this is evidenced in this study.

Remaining within a healthcare context, in their aim to determine a measure of professional success, Herbig, Bussing and Ewart (2001) consider both Critical Theory, and Repertory Grid Technique, within a constructivist paradigm. Positioning their study in constructed, rather than real-time conditions, they involve participants as actors in the critical incident, using a process of ecological validity to generate what they perceive to be a robust and realistic research situation. Using principles of RGT and Kelly's comprehension of tacit knowledge, elements are generated with the participants, and then using the dyad opposite method (see chapter 4) constructs are generated. A semi-structured interview followed with a view to cross-referencing the process. This rather complicated method makes it difficult to audit, and to validate the findings. Like Germain and Ruiz (2009), Herbig, Bussing and Ewart (2001) use experts, however unlike them their status is not qualified. Other factors made this article difficult to comprehend, for example, nurses are described, but not defined as successful

or unsuccessful. The means by which the RGT is structured and utilised also reduces their ability to use it to comprehend idiographic meaning. Rather, only nomothetic data is available for scrutiny. This article by Herbig, Bussing and Ewart (2001) is considered in contrast to the work of Candey (2001) who uses both semi-structured interviews and Constructivist Grounded Theory to provide data which is then triangulated using RGT. Candey's (2001) very concise record of her study demonstrates the use of RGT as a valid research method to determine findings and triangulate other data collected with relevance at both idiographic and nomothetic levels. These studies reflect the diverse approach in terms of purpose, construction and analysis of the RGT, and the link with Personal Construct Theory. As a mixed-method approach, RGT has potential to elicit both idiographic and nomothetic meaning within a larger context (Lambert, Kirksey & McCarthy, 1997). In this way, PCT and its associated method (RGT) have the potential to facilitate achievement of the aims of this study.

3.4. Constructivist Grounded Theory:

Constructivist Grounded Theory (CGT) links well to the aims of the study and fits with application of the repertory grid technique as the associated research method (Candey, 2001). Creating opportunity for reflexive analysis throughout, Charmaz (2017) considers CGT as a means of inquiry, which is both reflexive and as such transformative. If I am to consider my role in the development of this study, then a tool that enables reflexivity, encourages inquiry, raises opportunity to doubt findings and respond to the unexpected, has to be considered positively. CGT used within the process of analysis allows for what Charmaz (2017) describes as "methodological self-consciousness" (Charmaz, 2017, p. 36). That is, the opportunity to consider who I am, and what I bring to the study explicitly. In keeping with the premise that a dynamic paradigm strengthens the study (Guba, 1990), and the researcher is part of the research process, not separate from it (Charmaz, 2006;Guba, 1990; Kelly, 1963), Constructivist Grounded Theory presents an opportunity to explore my relationship with the process of data analysis and the synthesis of findings (Charmaz, 2017). With this in mind, it is then worth recognising that rather than deny researcher bias, reference to my role within this study is relevant.

3.5. The Personal Perspective:

Recognition of the diversity of thinking and application within qualitative inquiry requires the researcher to determine their stance and justify their position in the light of current arguments (Murray & Chamberlain, 1999). Reflecting upon the need to identify my position within this study (Horsburgh, 2003) it is relevant here to consider the choice of methodology at a personal level. Wishing to understand those similar to ourselves is not uncommon (Kanuha, 2000), and Fransella (2005) acknowledges that those interested in understanding Kelly's theory also wish to gain insight into themselves. At a personal level, application of PCT within this study creates opportunity for me, to meet conductors with a range of experiences and insights, and to consider my own practice within the context of their perceptions. These are experiences I would not otherwise have opportunity to achieve. Given that I am an insider-researcher, it is important that I stay true to the data whilst analysing and synthesising it (Butt, 2004; Jankowicz, 2004). As the process of reflexivity develops, desire to explore my theoretical justifications, personal interactions and articulations deepen, in this way increasing insight into my own processing and interpretation (Pillow, 2003). I align myself with the belief that man is not passive, that mind and body are united, and that cognition, affect and conation are linked. I accept that

life is not clear-cut (Butt, 2004), and recognise that my perception of self is both context-specific and relative to others (Walker & Winter, 2007). Personal Construct Theory as the underpinning methodology appears challenging and exciting. For an insider-researcher it appears to be relevant at many levels, and essentially has the potential to assist in the search for understanding conductors' perceptions of expertise.

3.6. Conclusion:

There is no commonly articulated understanding of what expert practice within CE is. The quest to determine perceptions of expertise held by conductors within the UK has no previous context. If qualitative research determines subjective realities often undetected within quantitative research, then a solution to the problem possibly can be determined (Lyons, 1999). Personal Construct Theory (PCT), as a constructivist, interpretivist theory, is considered part of the solution. Kelly's theory presents as a possible means by which the aims of this study can be achieved. Firstly, that it is possible to make the tacit explicit (Jancowicz, 2001). This is significant. If tacit knowledge develops through experience (Eraut, 2005), and is difficult to articulate (Eraut, 1993), a methodological approach that enables exploration of these

hidden meanings is relevant and appropriate. If it is possible to explore these meanings, then it may be possible to determine the ways in which conductors perceive expertise. Secondly once explicit it may then be possible to generate an understanding from which to facilitate development of practice and expertise. With interest in both thought and thinking behaviour, PCT has the potential to bring together both the objective realities and subjective construing of the individual's world (Klapper, 2011). In this way it may be possible to represent the professionals whose voice I want to be heard.

Exploring PCT as a research methodology, with opportunity to increase understanding of tacit perceptions of expertise, gives licence to explore the underpinning philosophical basis of CE (Grundtvig, 2010). Searching for a solution that addresses the research questions, whilst aligning with the profession under exploration, is an exciting development.

4.EXPLORING EXPERTISE: PHASE ONE:

"To live completely, fully in the moment is to live with what is…..then you understand it so totally that you are finished with it. When you see clearly the problem is solved" Krishnamurti

4.1. Introduction:

The means by which the research questions are addressed is applied in three phases. In this chapter, consideration is given to the first of these phases, and the means by which the problem can perhaps be solved. The second and third phases, (chapter 7), utilise the analysis (chapter 5) and synthesis (chapter 6) of the data generated by application of the Repertory Grid Technique (RGT). This chapter outlines the justifications for the choice of RGT as the method used, as well as the quantitative and qualitative means of data analysis.

A pilot study is advised (Hardy, Titchen, Manley & McCormack, 2006), and so an initial process of Repertory Grid construction and application is undertaken. Learning from the pilot, with five conductors, influences subsequent development of the research grid itself, as well as the

process of data analysis, and is referred to where appropriate.

In this study, 20 conductors working in the UK are opportunistically selected for interview. Data from the 20 interviews is analysed using a mixed method approach (Grice, 2016), an implicit aspect of RGT. Specifically, Principal Component Analysis (PCA) combines both quantitative and qualitative data (Clayson, 2013), and is chosen in order to determine the variance represented by smallest number of components to which the greatest meaning is attached (Brace, Kemp & Sneglar, 2009; Jankowicz, 2004). This process enables the quantification of themes within each grid, and acts as basis from which thematic analysis can develop. A qualitative inductive process of analysis, based upon Charmaz's (2006: 2017) Constructivist Grounded Theory (CGT), is subsequently used to generate idiographic meaning from each interview. From this, a synthesis, representative of conductors' perceptions of expertise at the nomothetic level, serves to support the construction of a self-reflective measurement tool.

4.2. Choice of Method:

With a heavy focus upon learning within a group context (Coles & Zsargo, 1998; Waiss & Borcsok, 2007) Conductive Education utilises constructionist theories and methods (Bacon, 2000). This fits well with PCT which sits within the constructivist paradigm. Personal Construct Theory (PCT), likened to a 'psychic X-ray' (Butt, 2004), underpins the choice of method in this initial phase. As a theory of personal understanding, PCT enables insight to individual motivations and interactions within a context, rather than objective, impersonal factual comprehension (Kuipers & Grice, 2009b). If I am to address the aims of this study, it is appropriate to use a method that both links with PCT as the underpinning methodology, and enables me to explore conductors' perceptions, of expertise. I want to go beyond the quantifiable elements associated with expertise, such as qualifications and range of experience (King et al., 2014), and move towards a perspective that explores the qualities of expertise as a construct (Germain & Ruiz, 2009).

4.2.1. Repertory Grid Technique:

The Repertory Grid Technique (RGT), is used within this study as an application of PCT (Hagans, Neimeyer,

Goodholm, 2000) rather than a stand-alone method of data collection (Fransella, Bell & Bannister, 2004; Steed & McDonnell, 2012). As a mixed-methods tool, the RGT fits well in health related research where quantitative research alone often proves insufficient to achieve the depth of study required (Darawsheh, 2014). As a research method, the RGT creates opportunity to explore the complexities of conductors' construing at an individual level (Kuipers & Grice, 2009b; Lambert, Kirksey, Hill-Carlson & McCarthy, 1997), and enables understanding of the commonalities and differences between these perceptions more generically.

The RGT is considered useful in exploratory studies where there is little prior research (Hutchinson, 1998), or when the articulation of ideas and thoughts is perceived difficult to express (Steed & McDonnell, 2012). Reflecting upon a previous study in which I explore rehabilitation nurses' perceptions of their role (Kinnersley, 1998), I am concerned that semi-structured interviews are more likely to confirm what I know already. Rather than stick with the familiar, I aim to find a novel way to facilitate the generation of an organic answer (Unluer, 2012) to the underpinning research questions and explore conductors' perceptions of expertise.

Critical Incident Technique (CIT) (Flanagan, 1954; Kemppainen, 2000), as a qualitative data method has the potential to explore perceptions through a process of observation and reflection (Hughes, Williamson & Lloyd, 2007). It does not however enable the tacit to become explicit (Eraut, 2007). Likewise, the use of first-person narratives, case studies, and perceived experts (Nelson & McGillion, 2004; Dorgo 2009; King et al., 2007) do not appear to illuminate understanding of perceptions (Yorke, 1978). Whilst it is possible to refer to literature to define expertise in the context of other professions (King et al., 2007), this does not serve the aims of this study. RGT, perceived to be an adaptable research method (Easterby-Smith, 1980), is chosen here for its potential to make the tacit explicit (Jancowicz, 2001), and enable understanding of expertise beyond the predictable (Lambert, Kirksey, Hill-Caarlson, & McCarthy, 1997; Ralley, Allott, Hare & Wittkowski, 2009).

4.2.2. Exploring the Tacit:

The ultimate aim for the researcher utilising RGT is to determine the individuals' mental map (Kuipers & Grice, 2009a) of reasoning from which all movement and behaviour is developed. In order to construe, or create meaning

(Clayson, 2013), the individual interacts with their environment in a number of ways. As a subjective mapping tool (Tan & Hunter, 2002), RGT facilitates articulation of internal perceptual links, and enables comprehension of individual construing. The RGT as a practical method (Bezzi, 1998) of gaining insight into the individuals' system of meaning making, reaches the emotive, without involving the cognitive (Gaines & Shaw, 1993). The unification of the cognitive and emotional is perceived to be a strength of Kelly's theory (Bezzi, 1998; Llewelyn, 2015), and relevant to this study. Rather than focus upon behaviour, RGT makes explicit the tacit, or hidden processes behind specific actions (Bezzi, 1998; Kuipers & Grice, 2009a). As such the RGT has potential to enable the collection of rich, qualitative data (Lambert, Kirksey, Hill-Carlson& McCarthy, 1997). By generating both qualitative meaning and quantitative objectivity (Smith, Hartley & Stewart, 1978) in the form of constructs and non-parametric ratings (Klapper, 2016), the grid has potential to generate understanding in a way that other methods do not so easily facilitate (Goffin & Koners, 2011; Steed & McDonnell, 2012).

In relation to this study, it is not the actions of the expert that I want to explore, but rather conductors' perceptions of

the expert, and the actions and behaviours they perceive them to exhibit. If it is possible to understand the ways in which conductors construe meaning (Clayson, 2013), then it may be possible to generate an understanding of expertise that reflects these perceptions. This approach fits with the aims of CE as a holistic pedagogy (Szogeczki, 2017), and with the aims of the study to explore conductors' perceptions of expertise. For these reasons, the RGT is chosen as the method of choice.

4.3. Construction of the Repertory Grid:

RGT as a data collection method is considered a structured (Kuipers and Grice, 2009a; Steed & McDonnell, 2012), semi-structured (Klapper, 2016) or informal (Hutchinson, 1998) interview. RGT is utilised within a range of therapeutic (Lambert, Kirksey, Hill-Carlson & McCarthy, 1997; Pavlovic, 2011), professional (Borell, Espweall, Pryce, Brenner, 2003; Kuipers & Grice, 2009a), business (Marsden & Littler, 2000) and research (White, 1996) contexts. Possibly consequentially, there remains no conclusive ideal application of the RGT as a research method (Fransella, Bell & Banister, 2004; Hagans, Neimeyer & Goodholm, 2000). The flexibility of the RGT makes it both appealing (Walker & Winter, 2007) and vulnerable. In particular this relates to its potential for

subjectivity and openness to interpretation (Burr, King & Butt, 2014). Its flexibility however is perceived to reduce researcher bias (Hunter & Beck, 2000). By enabling the researcher to construct a grid that enables the correct questions to be answered (Fransella, Bell, & Bannister, 2004), it is also possible to legitimise opportunities for grid development. This is perhaps appropriate, given Kelly's underlying principle that "every man is his own scientist" (Fransella, Bell & Bannister, 2004, p. 5), and his belief that ideas, rather than things, should be invented rather than discovered (Kelly, 1958). Possibilities for the use of the RGT are numerous, however all involve consideration of three main aspects; elements, bipolar constructs and a system of scoring (Kuipers & Grice, 2009a). These are considered in turn.

4.3.1. Elements:

The Repertory Grid is by definition a matrix, with elements that form the columns, whilst the elicited constructs form rows (Steed & McDonnell, 2012). Options for grid size, determined by the elements, vary from 8-13 (Catania & Randall, 2015; Fransella, Bell & Bannister, 2004; Ralley, Allott, Hare, Wittkowski, 2009). As a result, I chose to construct a grid with 12 elements (appendix 1.1). Once the structure of the grid is confirmed, it is then necessary to

consider options for element elicitation. Whilst it is possible to elicit elements with the research participant (Borell, Espwall, Pryce & Brenner, 2003), this method is likely to lengthen the time required for the interview, a consideration in gaining informed consent. There is also potential to reduce the applicability of the findings at the nomothetic level (Tan & Hunter, 2002), given that each grid will be unique. As nomothetic comprehension is considered significant to the aims of this study, I have decided to insert the elements, and construct a standardised format (Fransella, Bell & Bannister, 2004; Smith, Harré & Langenhove,1995; White, 1996; Ellis, 1999; Kelly, 1963) applicable to all 20 interviews.

4.3.2. Constructing the range of convenience:

The element is considered subordinate to the construct (Kelly, 1963) and as such directly impacts generation of it. The selection of elements therefore plays a significant role in the generation of the constructs (Edwards, 1998; Yorke, 1978), and so this part of the process of grid construction deserves consideration. The choice of elements relates to people, events or activities (Pollock, 1986), rather than describe behaviours or objects (Jankowicz, 2004). Elements reflect the context, or area of commonality (Fransella, Bell & Bannister, 2004), in this case conductor-specific roles, and

form the central part of the grid structure (Wright & Lam, 2002). Elements are linked to constructs in such a way that if the elements do not ask the right questions, or set the correct range of convenience, the constructs will be misrepresentative of them (Marsden & Little, 2000). For instance, if the elements reflect too wide a context, the range of convenience loses meaning (Kelly, 1963), becoming too generic. With recognition that the hidden meaning is context specific (Rosenszajn & Yarden, 2015) the choice of elements therefore has potential to impact the effectiveness of the grid itself (Fransella, Bell & Bannister, 2004; Jankowicz, 2004).

With recognition of the range of professional contexts in which conductors work (independent, CE only, multi-professional, educational) (PCA, 2019), elements are chosen that allow for differentiation of context, but sit comfortably within typical conductive practice. The main roles of the conductor (leader and facilitator) influence the construction of the pilot grid, and naming of the elements (Table 4.1.).

Table 4.1.

Pilot Grid Element Names

Element Name
Self as conductor
Ideal self as conductor
Ideal self as leader
Self as facilitator
Actual interaction with participants
Ideal interaction with participants
Most expert conductor worked with
Least expert conductor worked with
Most expert leader worked with
Least expert leader worked with
Most expert facilitator worked with
Least expert facilitator worked with

It is acceptable to include 'self', 'actual' and 'ideal' alongside 'least' and 'most' expert (Clayson, 2013), and to have elements that are personified as 'someone they have worked with' (Ellis, 1999; White, 1996). The findings of the pilot suggest however that the 'ideal' and 'most expert roles generate very similar bipolar construct pairs, and some conductors find it hard to think of 'someone they have worked with'. This is especially true for those with a limited range of experience. The heterogeneity and generalizability of the elements, although representative, is found to generate too much inconsistency across the grid (Wright & Lam, 2002). This impacts analysis of the findings, with no

clear conclusions made. Whilst representative of the conductor role, the wording of these elements however is later considered too heterogeneous and diverse. I achieve little by using all three descriptors (leader, facilitator and conductor), and perceive these factors to be limiting. Overall the pilot is considered too inconsistent (Wright & Lam, 2002) and so changes are put in place for the study grid itself (Table 4.2).

The wording of the elements in the study grid ensure greater specificity and homogeneity (Easterby-Smith, 1980). The 'ideal' is removed, but the 'most expert' and 'least competent' remain (Table 4.2). I consider these to be relevant to the professional context, with the potential to create an appropriate range of convenience (Tan & Hunter 2002). I focus upon specific roles and skills (leader, facilitator, pedagogue and communicator). Role titles are deemed to be more representative of the reality, (Haritos, Gindidis, Doan & Bell, 2004), whilst the inclusion of skills is more representative of the role, and reflects learning from the pilot. This is seen in Table 4.2.

Table 4.2.

Study grid elements

Element name
Self as leader
Most expert leader
Least competent leader
Self as facilitator
Most expert facilitator
Least competent facilitator
Self as pedagogue
Most expert pedagogue
Least competent pedagogue
Self as communicator
Most expert communicator
Least competent communicator

4.4. Construct Elicitation:

With the range of convenience determined by the selection of the elements, it is then necessary to consider how the elements themselves might facilitate construct generation. The twelve elements are placed in the columns at the top of the grid (appendix 1.1) In order to increase homogeneity, the elements are grouped so that 'self', 'most expert' and 'least competent' are associated with each of the main element roles and skills (leader, facilitator, pedagogue and communicator) in turn.

As with other aspects of the RGT, more than one approach to construct elicitation is considered. In order to achieve this,

the elements are presented in either triads or dyads (Hagans, Neimeyer, Goodholm, 2000). The dyad option however is discounted as a triad is perceived necessary to create a construct in a manner that creates sufficient difference without too much restriction of choice (Kelly, 1963; Lambert et al., 1997). In contrast to Hutchinson (1998), who considers the random selection of elements to maximise the range of convenience and increase participants' construing, Yorke (1978) proposes that randomisation ensures consistency in terms of times each element is selected. With this in mind, I have chosen to randomise the sequence of triads using a software website www.random.org, (accessed 2/1/13). The sequence generator programme is selected, each of the 12 elements are numbered and randomised, creating four columns. This process is repeated three times and produces 12 triads equally and systematically (Leach, Freshwater, Aldridge, Sunderland, 2001). This gives rise to a 12x12 grid, and a grid template is generated. The randomisation process is completed once, and the randomised triads inserted into the grid template. This ensures that each conductor is shown the same triad in the same order. The elicited constructs are then inserted into each conductor's grid against each question in turn (appendix 1.1). This reinforces "replicability and consistency" (Kuipers &

Grice, 2009a, p. 280) within and across grids, aiding nomothetic understanding (Catania & Randall, 2015; Jankowicz, 2004).

4.4.1. Constructs generation:

Constructs are dichotomous, or bipolar in nature (Pollock, 1985). As such, constructs elicited with the individual are considered more meaningful (McDonagh & Adams Webber, 1987) than when stated in the grid itself. This process of construct elicitation makes it possible to support a process of idiographic construing, with nomothetic relevance (Kuipers & Grice, 2009a). Construct elicitation can be generated by one of two methods; the triad different or triad opposite method. In both methods the similarity construct is elicited in the same way, that is the individual is requested to identify a similarity between the elements shown (Fransella, Bell & Bannister,2004). Both of these are processes proposed by Kelly (Epting, Suchman & Nickeson, 1971). Whilst both methods of construct elicitation create problems, the triad difference method is used more frequently, and considered more favourably due to its ability to increase the chance of all three elements being included (Hagans, Neimeyer & Goodholm, 2000). With this method however there is a chance that the constructs generated are 'bent' (Yorke, 1983), that is, the third element creates a construct that

appears less related to the original one given (Hagans, Neimeyer & Goodholm, 2000). In contrast, the 'opposite' method (Ralley, Allott, Hare & Wirrkowski, 2009) is perceived to generate a wider range of construct bipolarity (Epting, Suchman & Nickeson, 1971). This increases differentiation, perceived to reduce the possibility of 'bent' constructs (Yorke, 1983), with the elements remaining within the range of convenience (Yorke, 1978). It is however also argued that this method takes the constructs beyond the range of convenience (Hagans, Neimeyer & Goodholm, 2000), potentially reducing their relevance (Kelly, 1963). In view of these perceptions, I have chosen the triad opposite method in a bid to generate a broader range of bipolar construct pairs, believing that I would generate a more differentiated, and therefore more diverse description of the expert.

4.4.2. The Element-Construct Relationship:

Once constructs are elicited, the next step is to numerically define the relationship between the elements and the constructs. This again can be done in a number of ways. A process of dichotomizing, originally utilised by Kelly (Pollock, 1985), is one of three ways of demonstrating the relationship between the elements and the bipolar construct pairs. The other two methods are rating or ranking (Tan & Hunter,

2002). Ranking aids discrimination of the elements, however with 12 elements to rank, the difficulty of this task becomes more complex, and some of the detail becomes lost. It is however possible to demonstrate preference by use of a rating scale (Yorke, 1978), which increases the detail of meaning attached to each construct. This process of rating also ensures that both poles of the construct are considered equally, and increases the likelihood that the elements remain within the range of convenience (Easterby-Smith, 1980).

The use of a 5-point scale is seen as robust (Samanta & Samanta, 2013;Tan & Hunter, 2002). A longer scale, whilst more visually complex (Tan & Hunter, 2002), creates more detailed understanding (Fransella, Bell & Bannister, 2004). With this in mind, and given that the final decision on the rating scale is considered subjective (Tan & Hunter, 2002), I determine a 7-point rating scale appropriate for this study (Tan & Hunter, 2002; Fransella, Bell & Bannister, 2004).

4.5. Ethical considerations:

Approval is granted from The University of Wolverhampton Psychology Department Ethics Committee to engage 20 conductors working in the UK to participate in this study (appendices 1.2.1 & 1.2.2).

4.5.1. Anonymity and Confidentiality:

I refer to the BPS code of ethics and conduct (2019) in terms of respect, confidentiality and professionalism. This study with its focus upon perceptions, rather than evaluation of expert practice, appears to intrigue, rather than concern conductors. As the aim of the study is to determine perceptions rather than reflect upon specific actions, I feel less concerned that a conflict of interest develops. However I stay alert to the possibility that the unexpected may occur, and I inform conductors that I will not relay findings to management (Mercer, 2007).

Demographic information is collected to determine in particular length of time qualified and type of CE provision in which the conductor works (appendix 1.2.3). Each information sheet is numbered, and corresponds with each interview. There is however no direct connection between the

individual conductor and the interview number, as consent forms are not numbered. Grid data is kept separate from consent forms and conductors are assured prior to interview that all data is and will remain anonymous and confidential. Electronic data is saved on an encrypted hard drive and stored securely.

4.5.2. Being an Insider-Researcher:

The role of the 'insider-researcher', in which shared experiences play a significant part, fits well within a constructivist approach in which researcher reflexivity is considered essential (Charmaz, 2006), and in which the relationship is more likely to be considered equal (Mulhall, 2002). This fits with Kelly's desire to perceive the participant as the inquisitive partner, actively involved in the research process (Klapper, 2016).

With respect to my own impact, I desire a genuine relationship with the conductors and position my presence and insider status positively (Dwyer & Buckle, 2009). However, being an insider is a mixed blessing (Mercer, 2007); there is potential to increase acceptance and award a degree of trust and connectedness, simply because of the shared experiences (Mercer, 2007; Dwyer & Buckle, 2009;

Sutcliffe, Linfield & Geldart, 2012). There is however also greater opportunity to exploit the relationship (Moore, 2012). Perceived as a potential issue for part-time researchers (Mercer, 2007; Unluer, 2012), and qualitative researchers who may more frequently be part of the group under investigation (Moore, 2012), being an 'insider-researcher' is perhaps my main ethical consideration. With this in mind, I stay as true to the data as I can (Jankowicz, 2004) and keep to a minimum the recorded descriptions of conductors during phase one. With so few conductors working in the UK, it is easy in many instances for readers to know who I am referring to, and so whilst this information is available, it is not consistently included in this text.

Although being 'in' or 'out' in itself does not make for easy, good or difficult research, 'sameness' and 'difference' are equally not exclusive entities (Dwyer & Buckle, 2009). With respect to the impact of the previously-mentioned, 'outsider' study on the effectiveness of CE (Bairstow, Cochrane & Hur, 1993), consideration of my position as the 'insider' researcher is relevant. This is essential if the study is to be considered valid and trustworthy (Anderson, 2002). With this in mind the following outlines both the perceived advantages and challenges presented by my position as an insider-

researcher, and my attempts to deal with them from both the theoretical and practical perspectives.

4.5.3. The Power Dynamic: Who am I in the Study?

For Kelly (1963), measurement of the success of his theory relates to the ways in which it is communicated. If I am to create an understanding of conductors' perceptions of expertise, and use that understanding to generate a measurement tool, then I must ensure that I am able to communicate my aims, and later my findings in a way that is comprehensive, relatable and relevant. Part of that success, as I perceive it, relates to my ability to conceptualise the study holistically, as both connected and interconnected, with congruence between both the personal and the academic (Higginbottom & Lauridsen, 2014).

As an 'insider-researcher' I chose a topic in which I have much invested; exploration of a profession that I perceive to be transformative, and a desire to use my experiences to influence development of that potential within the profession. In this way I have a personally-invested interest in undertaking research that tells a story that might otherwise not be told (Kanuha, 2000).

As an insider-researcher, since qualifying as a conductor, I have become a PCA (Professional Body) committee member. The role of the PCA committee is one of advisor, supporter and educator (PCA 2019). I have no direct hold over individual conductors or CE centres. In this way I consider myself an insider-researcher; known to research participants, but not working with them directly (Unluer, 2012). In most situations I feel in a less powerful position as the researcher, having in many instances less conductive experience than those I interview. I also perceive myself to be dependent upon the conductors to give me their honest perceptions. I feel that in order to gain their trust I have to engage freely with them (Darra, 2008). I choose to present myself, and the study itself, in a manner whereby I hope they feel safe to talk and so are encouraged to participate. Whilst I know most of the conductors who participate in the research, unlike Mercer (2007) I do not experience the need to adapt or consciously keep to myself my thoughts on the study. Conductors demonstrate their respect for the study by volunteering their participation, and engage fully with my requests for help.

Whilst exploration of perceptions of expertise may not be perceived as emotive, the very fact of asking questions

provokes memories, and so potentially is an area of concern (Darra, 2008). Perhaps because there is little that I feel I can do to pre-empt or prepare for the impact of this, I am anxious and so reflect upon my behaviour and its impact from one interview to the next. I am concerned for the conductors who do express emotion, and at a personal level I am also concerned that I am exploiting them for my own gain (Mulhall, 2002; Darra, 2008). Whilst I do not feel I misrepresent myself, or the study, I am concerned that because I am an insider-researcher, conductors are more compliant (McGinn, 2005; Darra, 2008). Despite my concerns, with an eye on professional development, at both idiographic and nomothetic levels, conductors engage with the concept that their participation can assist in the formation of a professional development tool. Without fail, they demonstrate their desire to assist in its construction, whilst also articulating that they want to find out more about themselves.

4.5.4. Sample Selection:

Whilst being an 'outsider-researcher' does not prevent subjective influencing (Dwyer & Buckle, 2009), there are perceived benefits to being an 'insider-researcher'. One of these factors relates to the accessibility of research

participants (Mulhall, 2002). Due to the small numbers of conductors working in the UK, this seems to be a valid utilisation of the position. To some extent this eases the pressures associated with working in new settings, or where more formal introductions are necessary (Mulhall, 2002). A sample size of 20 research participants is considered appropriate (Hutchinson, 1998; Kuipers & Grice, 2009b; Smith, 2000), and so with this in mind, I request participation from conductors that I already have some contact with, but do not work with, and who are based within a 120 mile radius of my workplace.

I request consent via email from the managers of four CE centres. One later withdraws due to staffing pressures and so I look at other options. I gain consent from seven separate centres, and engage 20 conductors in the Repertory Grid interviews. Interviews take place at the individuals' place of work, with two exceptions; interview No. 5 takes place in the individuals' home, and No. 13 at my place of work. In both situations, this is more convenient for the conductors.

4.6. Interview Procedure:

Learning from the pilot, I decide to include a process of prioritisation (Fransella, Bell & Bannister, 2004) at the conclusion of each interview in order to extract the most important construct pair or meaning articulated by the conductor. This demands more time than given in the pilot study. With this in mind, and reflecting upon the findings of others (Ralley, Allott, Hare & Wittkowski, 2009), I allocate 45-60 minutes for each interview, and share this expectation with the conductors. Conductors have previously been sent the relevant research information (appendix 1.2.1) and prior to each interview I gain individual consent. I also verbally outline the purpose and aim of the research. The grid structure and interview process are explained fully, and in keeping with my role as an insider-researcher in a constructivist study (Webb, 1992), I articulate my desire that they play a role in the data collected. I reinforce that their contribution has potential to develop understanding of expertise within CE, and help in the construction of the measurement tool. I request that they be as honest as they can be with the answers they give, reiterating that there are no 'correct' ones, just those they feel best describe their perceptions and feelings.

4.6.1. Construct Elicitation:

In this study, the triad opposite method is utilised. In each interview, before each construct pair is elicited, I show each conductor the question-specific triad (appendix 1.1/ Table 4.3). I ask the conductor to choose two of the three elements that to them seem most similar, and then state the word or phrase that represents this similarity (Hagans, Neimeyer & Goodholm, 2000). Once this is confirmed with the conductor, the word or phrase is inserted into the grid against the similarity, or emergent pole (Hagans, Neimeyer, Goodholm, 2000) (Table 4.3.). I then ask them to state the opposite of this word(s). This too is then recorded in the grid, in the right-hand column, in the contrast, or implicit pole (Hagans, Neimeyer, Goodholm, 2000). In this way a bipolar construct pair is generated. For example in grid No. 20 (Table 4. 3.), question 1, the conductor is shown cards with elements 10, 6, 12 (self as communicator, least competent facilitator and least competent communicator). The conductor feels that there is a similarity between elements 6 and 12. She identifies this as 'not paying attention'. This is recorded on the left-hand side of the grid against Q1. The construct she articulates as its opposite is 'being observant'. This is then recorded on the right-hand side of the grid. This process is

repeated until the grid is complete with bipolar constructs against each question.

4.6.2. Rating Elements Against Constructs

The bipolar construct pairs define the conductors' perceptions of the elements: both in terms of what they do, and do not perceive them to be (Clark-Carter, 2004). In the grid format, this relationship is also quantified as the conductor is asked to score each element against each construct pair in turn (Jankowicz, 2004) i.e. from left to right across the grid. A 7-point scale is utilised, and so the closer the element is perceived to be to the emergent pole (left-hand construct), the higher the score; the more like the implicit pole (right hand construct), the lower the score. This is done in turn, one construct pair at a time, against each element (Table 4.3).

Table 4.3.

The bipolar construct pair in response to triad Q No. 1 (Grid 20)

20			1	2	3	4	5	6	7	8	9	10	11	12	
	Element Triads	**Elements/ Constructs**	**Self as leader (SL)**	**Most 'expert' leader (MEL)**	**Least 'competent' leader (LCL)**	**Self as facilitator (SF)**	**Most 'expert' facilitator (MEF)**	**Least 'competent' facilitator (LCF)**	**Self as pedagogue (SP)**	**Most 'expert' pedagogue (MEP)**	**Least 'competent' pedagogue (LCP)**	**Self as communicator (SC)**	**Most 'expert' communicator (MEC)**	**Least 'competent' communicator (LCC)**	
		Similarity Pole 7													Contrast Pole 1
1	**~~10~~, 6 12**	**Not paying attention**	**2**	**1**	**6**	**3**	**2**	**5**	**3**	**1**	**5**	**3**	**1**	**5**	**Being observant**
2	**4, 1, ~~8~~**	Observant													Unobservant
3	**2, ~~3~~ 11**	Connect & get through to the individual													Don't feel the person

4.6.3. Defining the Priority:

The final question at the end of each interview aims to determine the conductor's prioritised construct pair. By this stage in the interview, the grid is complete, however with reference to the laddering technique described by Jankowicz (2004), it is possible to identify more clearly the perceptions that hold the most significance for each conductor.

Conductors are asked to prioritise the construct pairs, and identify the most important meaning(s) from all that they articulate. This leads to the recording of a priority, which whenever possible is generated in its bipolar state. The priority is also documented verbatim in the notes, and is referred to in the analysis of each grid (chapter 5).

4.7. Validity, Triangulation, and Trustworthiness:

4.7.1. Validity of the RGT:

The repertory grid as a research method, dynamic and interactive, is not without its critics. Perceived to increase the risk of subjectivity due to its openness to interpretation (Burr, King & Butt, 2014), it is also considered to reduce researcher bias because of its structure and associated quantitative (Mayo, 2008; Ralley, Allott, Hare, Wittkowski, 2009) and qualitative (Hunter & Beck, 2000) features. As it is the research participant that gives the data to be inserted into the grid, not the researcher's interpretation of that data (Pollock, 1985), this seems a more justified perception. The fact that the grid is structured (Kuipers & Grice, 2009a; Steed & McDonnell, 2012) means that there are far fewer

options for me to intervene. I reduce researcher bias by note-taking throughout the interview (Yorke, 1987), and ensure that I use only the conductors' verbatim words. Rather than paraphrasing to confirm that I understand what is meant, I repeat the exact words in order to confirm the articulated words and meaning at the time. I also repeatedly reinforce that there are no 'correct' answers, only the conductors' own perceptions. This facilitates clarification and precision of the wording of each construct (Jankowicz, 2004), reducing the impact of interviewer bias (Hutchinson, 1998).

4.7.2. Triangulation:

Triangulation is strengthened if a mixed methods approach is utilised, during which both idiographic and nomothetic data is generated (Unsworth, 2001). The RGT as a mixed-method approach can therefore be considered a useful starting point. As a method it sits comfortably with Personal Construct Theory (PCT) as the underpinning methodology and within the constructivist paradigm. In this way, paradigm conflicts are minimised, and triangulation strengthened (Mulhall, 2002). With application of both quantitative and qualitative methods of data collection and analysis, alongside a process of reflexivity, verbatim note-taking and member checking, triangulation within this study is perceived positively (Ralley,

Allott, Hare, Wittkowski, 2009). By reading and considering the grids in many different ways (Jankowicz, 2004) whilst being reflexive (Dwyer & Buckle, 2009), I aim to stay as true as possible to the data and to the meanings expressed by the conductors.

4.7.3. Trustworthiness:

There is a specific need to address rigour within qualitative studies. In particular, because validity and reliability cannot be pursued in the same way as in quantitative research, the whole issue of replicability is altered (Webb, 1992). The aspects that impact "trustworthiness, credibility and consistency" (Dorgo, 2009, p. 22) need particular consideration. An audit trail in which the researcher acknowledges their personal contribution, is perceived to strengthen the repeatability (Webb, 1992), credibility and rigour (Bishop & Holmes, 2013) of a qualitative study. My ability to be reflexive is underpinned by my belief that I have a responsibility to the conductors to ensure that I represent their perceptions of expertise fairly, and as objectively as possible. In this way I can personify the epistemological, rather than the methodological (Probst, 2015) underpinning of this study. By including myself in this study, I can demonstrate the points at which I remain objective, and

where I use my subjectivity in the creative analysis of the data, and so strengthen rigour (Rose & Webb, 1998).

4.8. Analysis:

4.8.1. Overview:

Application of more than one method of analysis serves to strengthen and validate the findings of one, whilst searching for similarities and differences between them, validates the conclusions (Leach, Freshwater, Aldridge & Sunderland, 2001). Data collected from the RGT is representative of the individual's reality expressed in the moment (Pollock, 1985), and lends itself to both positivist and interpretivist analysis and interpretation (Kuipers & Grice, 2009a). Initial analysis with a focus upon the quantitative data is considered essential in order to simplify the data itself (Easterby-Smith, 1980), and develop further psychological understanding (Fransella, Bell & Bannister, 2004).

The process of quantitative analysis ensures accurate inferences can be applied to both the statistical and perceived connections (Yorke, 2001). The overall aim of this process is to expose patterns of connectivity and to identify

anomalies (Leach, Freshwater, Aldridge & Sunderland, 2001). The process of quantitative analysis reduces the need for words by simplifying the data itself (Easterby-Smith (1980). This fits with Kelly's perception of construing as a mathematical phenomenon (Fransella, Bell & Bannister, 2004). Statistics alone however can tell only one story (Forshaw, 2007), and so an iterative process of thematic analysis guided in this study by Charmaz's (2006) Constructivist Grounded Theory is also undertaken.

4.8.2. Determining the quantitative meaning:

A number of tools facilitate the process of quantitative analysis, no one being perfect, and all requiring a degree of simplification (Leach, Freshwater, Aldridge & Sunderland, 2001). PCA as a method of combining the quantitative with the qualitative aspects of Personal Construct Theory (Clayson, 2013) consolidates the data and increases the reliability of the process of analysis (Field, 2005). PCA enables analysis of the mixed data to be rotated in a manner that demonstrates the smallest number of components as representative of the greatest number of variables (Wolf, Dougherty & Kortemeyer, 2013). Patterns of variability are identified until all the variance is accounted for. In this way components, rather than common factors, are identified

(Brace, Kemp & Snelgar, 2009), the largest and most significant starting the process of meaning making (Jankowicz, 2004). PCA, maintains, and identifies the original relationships between the variables (in this case, the elements and constructs), (Yorke, 1978). Both Cluster Analysis and PCA can facilitate understanding of the elements and constructs separately, however Cluster Analysis is disregarded here, as the aim is to define individual relationships between elements and constructs rather than groups of data (Leach, Freshwater, Aldridge & Sunderland, 2001). It is for this reason that PCA is chosen in this study.

4.8.3. Application of PCA:

Both Slater's INGRID and SPSS are considered appropriate methods for quantitative analysis of data generated from the RGT (Candey, 2001; Leach, Freshwater, Aldridge & Sunderland, 2001). SPSS however is perceived to be less able to address the specific complexities of the RGT (Grice, 2002). Instead, Idiogrid, a variant of Slater's original INGRID (Bell, 2004; Fransella, Bell & Bannister, 2004), constructed specifically for use with the RGT (Grice, 2002) is used in this study. Idiogrid supports application of PCA, the aim of which is to expose ways in which the individual thinks and feels relative to a particular situation. PCA corrects the direction of

the relationship, and so there is no need to alter the polarity of the bipolar construct pairs (Leach, Freshwater, Aldridge & Sunderland, 2001). Idiogrid produces a scree plot of eigenvalues, and a 2D representation of grid data. Both bipolar construct pairs, and the elements to which they are attached, are represented (Kuipers & Grice, 2009b) and plotted relative to the components (Grice, 2002) (represented by the axes). In this way it is possible to determine correlations between the variables; the closer the geometric relationship, the stronger the correlation (Borell, Espwell, Pryce & Brenner, 2003; Ralley, Allott, Hare & Wittkowski, 2009). Similarly, the longer the line of axis between the two constructs, the greater the variance captured by the components (Leach, Freshwater, Aldridge & Sunderland, 2001). In contrast the elements are plotted singularly. In this study both SPSS and Idiogrid (version 2.4) are utilised to identify the variables and components held within each grid by use of Principal Component Analysis (PCA). Application of both programmes increases my familiarity and confidence in the study findings (Leach, Freshwater, Aldridge & Sunderland, 2001).

4.8.4. Rotation:

Rotation is a process in which the 'simple structure' of the data can be determined (Grice, 2002). Un-rotated, or orthogonal rotation allows the variables to continue to be independent, or uncorrelated (Field, 2005). In this study an oblique (promax) rotation is chosen, as the possibility of factors remaining uncorrelated when working with people is considered low (Field, 2005).

4.8.5. Eigenvalues:

Eigenvalues represent the components, or patterns of variability (Jankowicz, 2004). By condensing the relationships into components, it is possible to represent the correlations (Brace, Kemp & Snelgar, 2009) between the variables, that is between the constructs and the elements (Bezzi, 1998). This gives rise to a process of labelling that expands comprehension of the data, whilst simplifying it simultaneously (Kuipers & Grice, 2009b). In this way it is possible to summarise the variability into as few components as possible (Jankowicz, 2004).

Eigenvalues and variables are connected in the sense that the total number of eigenvalues equals the number of variables (Forshaw, 2007). Factors with eigenvalues of 1 or

more, have produced some variable reduction, and are considered valuable (Ralley, Allott, Hare & Wittowski, 2009). An eigenvalue of less than one accounts for less variance and does not assist with variable reduction. High eigenvalues are associated with higher variance, and so fewer factors, whilst lower eigenvalues are associated with lower variance and more factors. The process of variable reduction enables reflection of the overall meaning and increases comprehension of the data (Kuipers & Grice, 2009b). Construct correlation, as a means of determining the variance on the first factor, gives insight into the "cognitive complexity" of the construing (Bell, 2006, p. 273); the greater the variance on the first factor, the lower the complexity of construing (Ralley, Allott, Hare & Wittowski, 2009). Three types of complexity are identified; fragmented in which no component is identified, monolithic with one component, and complex with two or more (Bell, 2004).

Whilst it may be possible to determine statistical relationships, it is the interpretation of these relationships that influences the analysis itself. The use of PCA however demands that assumptions are made; statistics can only lead so far towards the answer (Forshaw, 2007). In order to expand comprehension, subjective interpretation is required

(Clark-Carter, 2004; Clayson, 2013). From this point it is possible to continue with qualitative, thematic analysis in which data is coded to generate comprehension of ideas, perceptions and beliefs held tacitly by conductors.

4.8.6. Qualitative Analysis: Thematic Analysis:

A Grounded Theory (GT) approach to thematic analysis fits with the principles of Personal Construct Theory, the aim of which is to understand the reality of a context-specific population (Burr, King & Butt, 2012). GT as a methodological tool is used to analyse themes (Hardy, Titchen, Manley & McCormack, 2006; Lyon, 2015), and generate items for inclusion within a measurement tool (Germain & Tejeda, 2012). Thematic analysis, as a flexible process, from which rich data can be generated, is also considered to fit with the aims and practice of constructivist research (Braun & Clarke, 2006).

Constructivist Grounded Theory (CGT), developed from Grounded Theory (Giles, de Lacey & Muir-Cochrane, 2016), assumes that rather than existing separately to the research, the researcher constructs, and is part of the research context (Charmaz, 2006). Constructivist Grounded Theory is dependent upon the researcher's perspective, and as such is

required to be explicit (Cooney, 2011). As such, Constructivist Grounded Theory (CGT) fits well with this initial phase, positioned within the constructivist paradigm. I therefore position myself clearly within the research, in which I value the underpinning philosophical principles within CE, in particular the prioritisation of the development of the learners' personality, and the conductors' responsibility to believe that change is possible (Feuerstein, 2008). I therefore try to ensure that when I interview and analyse the data I remove these expectations from my thinking. I must see the data as it is, accepting that my priorities may not be that of others, and that in order to determine conductors' construing of their perceptions of expertise, I must consider all data equally. In this way I aim to be reflexive (Horsburgh, 2003), whilst also acknowledging the impact of my subjectivity upon the process of analysis. The data is collected over a four-month period. This gives time between interviews to reflect upon the impact of my perspectives, and to articulate my learning, in the analysis.

To ensure that compression of ideas is not overdone, and validity is not compromised as a consequence of lost detail (Ralley, Allott, Hare & Wittowski, 2009), each grid is analysed in the same way. Following the quantitative analysis

in which the cognitive complexity of the grid and the number of components is determined, the construct pairs are analysed. Use of thematic analysis creates the opportunity to link categories and subcategories. Coding, perceived to be a fluid system (Charmaz, 2006), supports an inductive process of analysis and synthesis. Data is gathered from the bipolar construct pairs, interview notes, reflective notes and observations. This data supports the synthesis of personal meaning-making of conductors' perceptions of expert and least competent practice. Themes emerge as a process of categorisation is developed and refined in response to the meanings generated (appendix 1.3). The priority, articulated at the conclusion of each interview, adds to the thematic analysis, and to conductors' perceptions of expertise.

Use of CGT as a means of analysis is, like application of the RGT, a flexible process (Candey, 2001). Charmaz (2006) identifies two stages of coding; initial and focused. These dynamic, rather than linear, stages facilitate comprehension of both the idiographic, and the nomothetic as the researcher moves between and across grids. During the initial phase, "*in vivo* codes" (Charmaz, 2006, p. 55) generate insight to the tacit meaning at an idiographic level, as analysis enables consideration of individual actions and associated beliefs.

Focused coding supports comparison across grids as nomothetic comprehension and the construction of larger more descriptive codes is developed (Giles, de Lacey & Muir-Cochrane, 2016). Grids are analysed ideographically, and collectively. Use of an approach that supports the development of theory generation (Charmaz, 2006) is considered relevant to the synthesis of nomothetic commonality. Thematic synthesis, influenced by Charmaz's Constructivist Grounded Theory (2006), is utilised within this study, and discussed further in chapter 6.

4.9. Conclusion:

Application of the Repertory Grid Technique (RGT) enables the tacit to become explicit (Jankowicz, 2001), and facilitates exploration of conductors' perceptions of expertise. The RGT, as a mixed-method tool, equally facilitates a mixed-method approach to analysis. Principal Component Analysis (PCA) and Constructivist Grounded Theory (CGT) support this process and enable conductors' perceptions of expertise to be examined at both idiographic and nomothetic levels. Sitting within a constructivist paradigm, both PCT and CGT highlight the need for a level of subjectivity otherwise discounted in positivist paradigms. The methods identified in this chapter give licence to my reflexivity, and serve to strengthen the

trustworthiness of the study. In the following chapter each interview is analysed as discussed above.

5. INDIVIDUAL PERCEPTIONS OF EXPERTISE:

"Methodologically, I had to learn to rock and then roll over before I could sit up……Most important I had to be willing to *try.* The *try* is everything*" (*Bolte-Taylor, 2009, p93-94*).*

5.0. Finding a Context:

In this chapter, exploration of individual conductor's perceptions of expertise, reflect their professional journeys; their influences and their motivations, as they try to make a difference to peoples' lives. With circa 100 conductors registered and working in the UK, the 20 conductors interviewed for this study represent many of the professional contexts in which conductors work in the UK. Demographic data is collected prior to each interview (appendix 1.2.3.). With both UK and Hungarian trained conductors, this cohort represents both newly qualified and those with more than twenty years' professional experience. In this study, of the 20 conductors interviewed, 10 (50%) have 10 or more years' experience. Of these 10, eight have more than 20 years experience in Conductive Education. The mean = 22.7 years. The 10 remaining conductors (50%) have less than 10 years experience. Of these, six have five or fewer years'

experience. In this group, the mean = 5.24 years' experience. Taking the 20 conductors as a group, the mean = 14 years of experience. This is summarised in Table 5.0.

Table 5.0.

Summary of years experience and grid number.

Yrs of Experience	<1 Yr	< 5 Yrs	5 Yrs	>5 Yrs	>10 Yrs	> 15 Yrs	>20 Yrs
Grid no.	19	4, 17	5,13 20	7,8, 14, 16	18	6	1,2,3,9, 10 11,12, 15
Total	1	2	3	4	1	1	8

Whilst conductors' experience is not qualified in any way it is possible to identify the professional context at the time of the interview. Past experience, when mentioned during the interview, is documented in the verbatim notes (appendix 1.2.5). The cohort of conductors is small, however conductors working in both multi-professional and CE-only centres are represented. Of the 20 conductors, seven work in a multi-professional setting, whilst 14 say they work in conductor-only teams. This includes one conductor who works in training, and perceives herself to work in both multi-professional and conductor-only settings.

Whilst experience alone does not create expertise (Lyneham, Parkinson & Denholm, 2009), a minimum of ten years is

associated with expert practice (Ericsson & Krampe, 1993). In the knowledge that experiential learning is influenced by, as much as it influences cognitive processing (Eraut, 1985), it waits to be seen how, and if experience relates to perceptions of expertise.

5.0.1. The Findings in a Context

With a focus upon the idiographic, analysis of each of the repertory grid interviews undertaken with 20 UK based conductors is identified in this chapter. As an insider researcher, interviewing around one fifth of the conductors working in the UK, it is more challenging to retain a level of anonymity (Moore, 2012). Detail is collected, however is not included if it is felt the conductor can be identified from the description.

Raw data leads the process of analysis from start to finish and serves to strengthen the reliability of the findings (Jankowicz, 2004; Ralley, Allott, Hare & Wittkowski, 2009). The context for the analysis of each interview is set by the conductors' demographic data (appendix 1.2.3). Articulation of professional experience comes to light during the interviews, and is included in the introduction to each grid analysis. Whilst Kelly's theory of personal construing does

not highlight the social context of learning (Marsden & Littler, 2000), the conductors' articulated words and phrases, recorded verbatim in interview notes, serve to triangulate qualitative analysis of the constructs generated and subsequent synthesis of findings (chapter 6). Contextualising each interview in this way forms a necessary part of the analysis process (Jankowicz, 2004), and facilitates understanding not only *what* is said, but also *how* the constructs are generated. Observations made during the interview are also considered worthy of analysis (Charmaz, 2006). These are recorded at the end of each interview, and serve to strengthen the process of researcher reflexivity (1.2.4).

5.0.2. Analysis of Grid and Interview Data:

The process of quantitative analysis is identical for each grid. Principal Component Analysis (PCA) is used to determine the number of components, the % variance, and the eigenvalue for each grid. These findings subsequently underpin a qualitative process of thematic analysis. The aim of this study is to define conductors' perceptions of expertise, with a focus upon the constructs and the relationship between them, rather than the inter-element relationships (Bell, 2006). Categorisation of constructs with a focus upon the process

involved (Gengler, Howard & Zolner, 1995) holds relevance here. To facilitate this, Constructivist Grounded Theory (CGT) (Charmaz, 2017) guides an inductive process of initial and focused coding (Charmaz, 2006). In this way, comprehension of the idiographic detail of each grid is facilitated. Initial coding creates opportunity to explore the words used, and to compare them with the articulation of others. It is then possible to expose tacit meaning as unique to the individual, and representative of others (Charmaz, 2006). Focused coding subsequently supports the conceptualisation and categorisation of the data itself. This process enables further comparison and comprehension amongst and between the grid data, and is discussed further in chapter 6 (synthesis of findings).

5.0.3. Key to Information Contained in this Chapter:

Element titles are shortened for ease of inclusion in the grid itself, and in the analysis of grid data (Table 5.0.1.). Inclusion of constructs and verbatim notes are also differentiated when included in the text (Table 5.0.2.).

Table 5.0.1.

Grid Element Labels.

	Self As	Most Expert	Least Competent
Leader	SL	MEL	LCL
Facilitator	SF	MEF	LCF
Pedagogue	SP	MEP	LCP
Communicator	SC	MEC	LCC

Table 5.0.2.

Grid and interview data included in text.

Source of information	Represented in the text by
Bipolar constructs/ priorities in the text	' xx-xx'
Verbatim articulation in the text	"xxx"
Gap in verbatim notes	……..

5.0.3. Bipolar Construct Pairs:

Unlike elements, constructs are bipolar (Pollock, 1985). The consequence of this for analysis is that constructs require to be reversed. When the quantitative data are analysed using PCA, and displayed in the Idiogrid figure, reversal however occurs automatically (Kuipers & Grice, 2009b; Leach, Freshwater, Aldridge & Sunderland, 2001). For example, constructs associated positively with expertise are more strongly associated with the emergent, or left-hand pole of the grid, and attributed with a higher score. Those associated with the least competent element roles, are routinely associated with the implicit, or right-hand pole of the grid, and are given a lower score (blank grid appendix 1.1). During the triad process of construct elicitation (chapter 4.6.1) there

are times in each grid interview when the similarity construct, applied to the emergent pole, describes the least competent rather than the expert. In these cases the construct and the subsequent rating process requires to be reversed. For example, in Grid 1 the bipolar construct pair of weak-strong is reversed in the Idiogrid representation. This process of reversal requires the element rating scores (against each construct) also to be reversed. In this case 7=1, 6=2, 5=3, 4=4, 3=5, 2=6 and 1=7. In order to ease comprehension, in the text, the individual grid data, both qualitative and quantitative, is presented in tables in its original, un-reversed format. As the Idiogrid reverses the constructs, this is reflected in the figure for each grid. In light of this, the reversed constructs are highlighted in **bold** when presented in the table for each grid.

The format for each interview is consistent. The process is explained in full, and conductors are requested to think of individuals, rather than the elements in abstract form. In the following text, this is commented upon only when there is any deviation from this format, or when comment is relevant to the context. Four conductors could identify specific individuals, and so comment is made in these interviews only.

5.1. Grid 1:

5.1.1. Overview of Interview:

This Hungarian-trained conductor qualified more than 30 years previously. I have been qualified for less than a third of this time, and feel under-qualified to be interviewing her, however I also recognise that I am privileged to be able to do so. I focus my introduction of the interview process upon her as a conductor with a wealth of experience. Before the interview begins I ask that where possible she thinks of actual individuals, rather than the roles in abstract form. In relation to the most expert roles, she is able to do this. As part of the conversation I reiterate that there are no correct, or incorrect answers, and that I want her to articulate her thoughts and perceptions freely. With this as the focus, I aim to create a safe atmosphere. I feel anxious as this is my first interview. I try hard not to let my anxiety show. In spite of, or perhaps because of this I focus upon my tone, my facial expression and the words I use. I am aware that I create tension that takes a little time to ease.

Initially she is hesitant, and the interview is stilted, however as the questions progress, I relax. This has a positive impact upon my connection with her. As I gain greater control of my

feelings and relax more, I give better eye contact, and she expresses her thoughts and feelings more freely. She talks more openly about her experiences and of herself as a conductor. In particular she talks about the influence, when she was newly qualified, of one mentor. She refers to this individual, as a role model, in the context of the Most Expert conductor. At this point she becomes emotional, as she relays some of her experiences, and the impact this mentor had upon her confidence and communication skills. She articulates her insecurities. In particular these relate to how she perceives herself within the team in different professional contexts. I let her talk through the emotion, and the interview concludes positively. She perceives that it is conductors' ability to use their personality that is the most significant aspect of their professional role.

5.1.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.1.1. The rating scores for each element against each bipolar construct pair is shown in Table 5.1.2.

Table 5.1.1.
Grid 1: Bipolar construct pairs. Those in **bold** are reversed in Figure 5.1

Emergent pole Constructs	Implicit Pole Constructs
E1.Weak	**I1.Strong**
E2.Teach whole personality	I2.Individual, one aspect
E3.Human principle	I3.Not able to connect
E4.Link with teaching	I4.Least able observe
E5.Communication & teaching	I5.Little knowledge
E6.Can't observe	**I6.Can see the group**
E7.Learning from them	I7.Unresponsive
E8.Personality	I8.Can't see the whole
E9.Empathy	I9.Blocks learning
E10. Makes them passive	**I10.Generate activity**
E11.Communicate expectation	I11.Not believe in potential
E12. Positive personality	I12Negative atmosphere and learning

Table 5.1.2.
Grid 1. Element and Construct Scores

Question No. / Elements												
El/co	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	2	2	7	1	1	7	1	1	7	2	2	7
2	7	5	1	7	7	1	7	7	1	6	6	1
3	7	5	1	7	7	3	7	5	1	6	6	3
4	6	7	1	7	7	1	6	7	2	7	7	1
5	7	7	1	7	7	1	7	7	1	7	7	1
6	1	1	7	1	1	7	1	1	7	1	1	7
7	7	7	1	7	7	1	7	7	1	6	6	2
8	7	7	1	7	7	1	7	7	1	6	6	1
9	7	7	1	7	7	1	7	7	1	6	6	2
10	1	1	7	1	1	7	1	1	7	1	1	7
11	7	7	1	7	7	1	7	7	1	7	7	1
12	7	7	1	7	7	1	7	7	1	6	6	1

Using Idiogrid software, PCA analysis determines one component. This explains 95.43% variance, with an eigenvalue = 11.45. One component suggests a reduced level of cognitive complexity (Bell, 2004). These findings

inform further analysis, the aim of which is to determine a single theme from the constructs within the grid.

The PCA findings are represented in the 2D Idiogrid analysis of the grid data, with Promax rotation (Figure 5.1). The bipolar construct pairs (Table 5.1.1.) are identified on the outside of the Figure, whilst the elements (Table 5.1.2.) are itemised within the Figure itself. Of particular note are the short distances between the elements and constructs, which suggest there is a correlation between the constructs on the emergent pole (itemised as ENo.), and the ME, and Self roles (shown as red .). The LC elements connect with the bipolar opposite constructs in the bottom right of the figure (itemised as INo.). The correlation between the bipolar construct pairs and the unipolar elements reflects the quantitative analysis that one component exists. These findings support the analysis described above, and supports this conductor's perception of herself as aligned most closely to the expert across all element roles (see Self and ME element scores in Table 5.1.2.), and in particular that of leader.

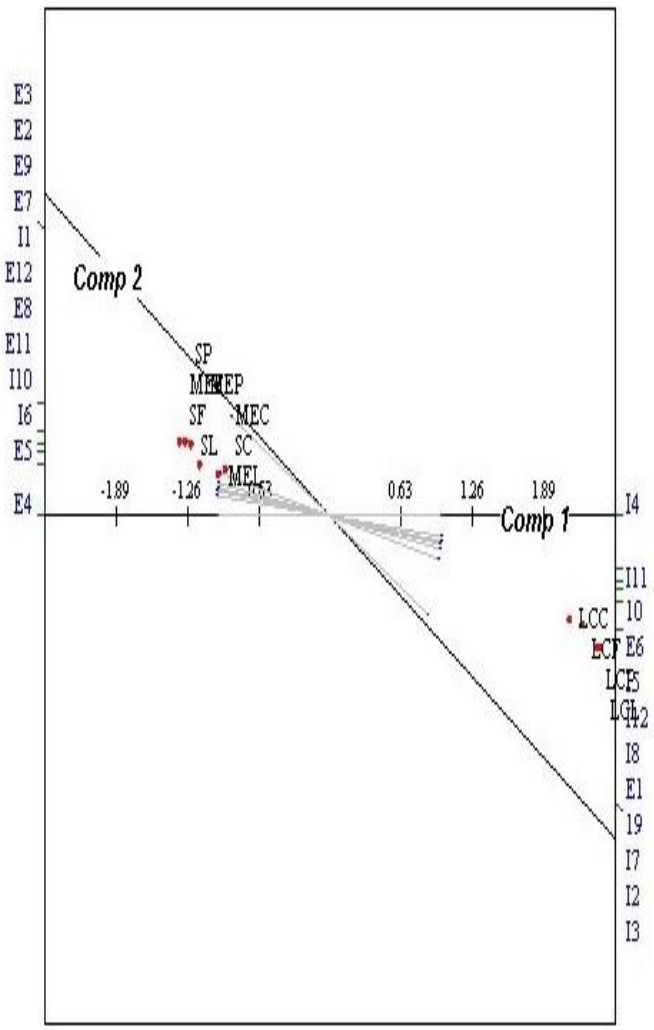


Figure 5.1 Grid . Idiogrid representation.

5.1.3. Qualitative Analysis:

5.1.3.1. Priority:

At the conclusion of the interview this conductor identifies the construct she perceives to be the most important. In keeping with the bipolar nature of the constructs generated, I ask her to describe this in its bipolar state. She describes the

expert as able to use their personality, knowledge and belief to create a relationship with the learner. This influences the way in which they observe, set expectations, and lead learning. In contrast, the least competent is described as unable to use their personality to develop a relationship. Consequentially, they find it hard to believe in the learner, or observe for potential. Rather they disbelieve that learning can take place. This has negative impact on both the learner and themselves. The priority is summarised as 'conductor's ability to use their personality to positively impact learning – lack of belief with negative impact upon learning'.

5.1.3.2. Initial Coding:

In keeping with the priority articulated above, the bipolar constructs (Table 5.1.1.) link personality to application of professional skills. Construct pairs 'weak-strong' (Q1), 'personality-can't see the whole' (Q8), 'empathy-blocks learning' (Q9), 'link with teaching-least able to observe' (Q4), 'communicate and teach-little knowledge' (Q5) and 'generate activity-makes them passive' (Q10), demonstrate the conductor's ability to communicate and develop a pedagogic relationship based upon equality and activity. Other constructs describe professional skills, such as the conductor's ability to observe the individual and the group,

and to facilitate learning; ‘can see the group-can’t observe’ (Q6), ‘communicate expectation-not able to connect’ (Q11) and ‘teach whole person-individual aspect’ (Q2). Conversely, this conductor perceives the least competent to be unable to ‘learn from them-unresponsive’ (Q7), or to create an interactive relationship with the learner ‘human principle-not able to connect’ (Q3). Rather than create a positive learning relationship ‘positive person-negative atmosphere’, (Q12), the least competent is perceived to focus upon the negative, to disbelieve that the learner has potential, and blocks learning. The theme determined from initial coding is stated in its bipolar form, as ‘use of self–unable to connect’.

5.1.3.3. Focused Coding:

In this process of analysis, it is the categorisation, and conceptualisation of constructs that is of interest (Charmaz, 2006). Focused coding expands the initial comprehensions, and generates greater insight into this conductor’s construing. Reference to verbatim notes taken from the interview makes it possible to consider the initial coding more rigorously.

This conductor considers herself an expert in all element roles (Table 5.1.2.), however during the interview it appears

that she may doubt this in reality. She perceives that she is more able to be herself within the practice-based group situation, compared to when she is with her colleagues and the wider professional team. She recognises that her communication skills within the team are less effective than when she is in the practice-based group. It is at these times that she perceives herself to be expert. This dichotomy suggests that whilst she acknowledges her expertise within the group, she finds difficulty in communicating and being expert within the wider professional team. She acknowledges these differences, but considers herself expert in spite of them. The ability to communicate, and to use personality to convey expertise, is present throughout the interview, evidenced in the construct pairs and verbatim notes.

This conductor, whilst she does not include belief in her constructs, perceives that ability to convey belief in the learner is dependent upon the conductor's knowledge, ability to communicate, and use of their personality. She articulates this as "100% positive in presentation……belief in what you can do for them and what they are capable of doing for themselves". Conversely, she perceives the least competent conductor as unable to use their personality. It is lack of application of personality that she feels blocks their ability to

connect with the learner at a personal level, to lead learning, to see the bigger picture, and to comprehend the potential of their pedagogical role. Personified in the 3rd bipolar construct pair; 'human principle-not able to connect', the interpersonal relationship is perceived as central to this conductor's perception of expertise. With consideration of both initial and focused coding, the theme identified within this grid is stated as 'use of personality to lead learning-no connection blocks learning'.

5.1.4. Summary of Grid 1:

This, the first of 20 interviews, links personality with expert practice. For this conductor there are two professional realities; one in the conductive group, the other within the professional team. Whilst she recognises her weaknesses outside of the group, she perceives herself as expert regardless of context. This interview generates insight into the significance attached to the use of personality as a characteristic of expertise. Her construing suggests a strong link between personality and the professional role, in which use of personality enables connection with the learner, with subsequent impact upon their learning. This interview suggests that as the conductor perceives herself differently in

different contexts, perceptions of expertise are context-specific.

The process of coding encourages me to reflect upon my own professional development. As a newly-qualified conductor I had been challenged by my manager to be myself more in the group, and to challenge my belief of potential. As a nurse, my professional persona gave me permission to hide behind my role, and to disbelieve that change is possible. The articulations and construing of this conductor suggest that these are not attributes of conductive practice, and reflect the challenges implicit within the development of expert conductive practice. Whilst at one level this interview highlights the perceived contextual nature of expertise, it also implies that use of personality and the ability to communicate are perceived to be context-free.

5.2. Grid 2:

5.2.1. Overview of Interview:

This 49-year-old conductor qualified originally as a teacher. She is one of the first British conductors to train at the Petö Institute in Hungary, 22 years previously. This conductor has a range of International and UK-based experience, and works alongside the conductor in the first interview.

As with the first interview I reinforce that there are no correct answers, only her own perceptions, however her responses initially are rigid as she familiarises with the interview structure. I gain informed consent and ask that where possible she thinks of actual individuals, rather than the roles in abstract form. She is unable to specifically identify one individual throughout, although she is able to think about the range of conductors she has worked with. As with the first interview, this conductor requires a little time to settle in to the interview, however with time, she relaxes, and becomes more confident. This is evidenced more when the triad of elements includes at least one self-element. At these times she relates at a personal level to the question. As she relaxes, the tone of her voice changes and her articulated thoughts become more fluent. Logistical reasons force the interview to take place over two days. By the second day the process is more familiar and so following a short recap on what she has said, the interview is completed.

5.2.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor, during the interview are itemised in Table 5.2.1. whilst the rating scores for each element, against each bipolar construct pair is shown in Table 5.2.2.

Table 5.2.1.
Grid 2: Bipolar construct pairs. Those in **bold** are reversed in Figure5.2.

Emergent Pole Constructs	Implicit Pole Constructs
E1.Interaction	I.1.Isolation
E2. Enable understanding	I2.Not tapping into their understanding
E3. Observe responses	I3.Not noticing responses
E4. Two-way process- observation and communication	I4.Stifling learning
E5. Understand the learner	I.5.Not able to understand the learner
E6. Unable to see the needs of the individual	**I6.Able to see and understand the individual's needs**
E7. Facilitate the learning process	I7.Disbelief that learning is possible
E8. Linking theory with practice	I8.Mechanical without the understanding
E9. Better understanding=positive communication	I9.Nothing of herself in it
E10. Limited understanding	**I10.Sound understanding and ability to use it**
E11. Communication of trust and belief	I11.Breakdown of trust and belief
E12. Belief and understanding	I12.Not knowing what you are trying to facilitate

Table 5.2.2.
Grid 2. Original data: element and construct scores.

Question. No./ Element titles

Elements	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	6	7	2	6	7	2	6	7	2	7	7	2
2	6	6	2	7	7	2	6	7	2	7	7	1
3	7	7	2	7	7	2	6	6	3	7	7	1
4	6	7	1	7	7	1	6	7	1	7	7	2
5	7	7	1	7	7	1	7	7	1	7	7	1
6	1	1	7	1	1	7	1	1	7	1	1	7
7	6	7	1	6	7	1	6	7	1	7	7	2
8	7	7	1	6	6	2	6	7	2	6	7	1
9	7	7	2	6	6	3	7	7	2	7	7	2
10	2	1	7	1	1	7	2	1	7	2	1	7
11	6	7	1	7	7	1	6	7	1	6	7	1
12	7	7	1	7	7	1	7	7	1	7	7	1

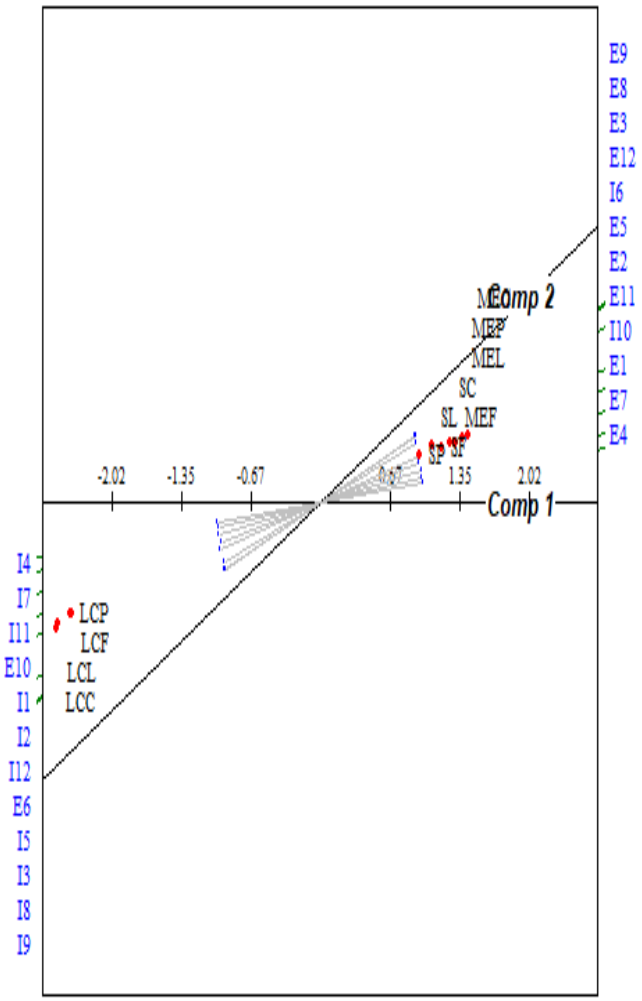


Figure 5.2 Grid 2. Idiogrid representation.

Using Idiogrid software, PCA analysis is undertaken. Analysis determines one component. This explains 92.60% variance, with an eigenvalue = 11.11. The relationship between the elements and constructs is demonstrated in the 2D Idiogrid representation (Figure 5.2). The axes are acute, with a small angle between them. This reflects the correlation between

the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component. One component suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid.

It is of note that the ME and Self elements are close to each other and to the constructs on the emergent pole. The LC elements are also close to each other, and to the constructs on the implicit pole. This reflects the level of correlation between the variables (Ralley, Allott, Hare & Wittikowski, 2009). This conductor is perceived to align more closely to the ME (Table 5.2.2) although never scores herself as expert. She perceives herself strongest as a communicator, with pedagogue her weakest element role.

5.2.3. Qualitative Analysis:

5.2.3.1. Priority:

The priority identified by this conductor relates to her perceptions of the pedagogic relationship. She perceives it to be the conductor's role to create the relationship. For her, this is based upon belief and trust; "belief is black and white,

is you as a person. It is the fundamental underpinning of the relationship. Trust is more fluid, the relationship part of the connection". She considers this central, the basis upon which everything else develops. She perceives that belief and trust are best experienced through the relationship. In this way it is possible for the individual to "feel the energy, safety, secure, brave (and a bit scared), confident, a little unsure but trusting it will be OK, someone will guide, someone will hold your hand, (I will become) more sure of myself and capable, more sure of my own potential, belief in self". She concludes confirming it is about "how you make them feel". In contrast, the least competent is described as "insecure, unsure, afraid generally, vulnerable, don't really believe in me (the individual) and don't really care if I move forward". She continues.…."what matters to them matters to me, that's what will make them as a person feel those positive emotions".

She sees CE "as a two-way process, understanding comes in so I know what matters to them - it comes back from them". She believes there is an exchange of energy and trust giving rise to a "shared understanding". She relates her thinking to her understanding of the work of Buber; "I and thou, trust and belief. This may be momentary but then you can move

them through something, then it becomes theirs……Without this belief, everything would be mechanical". From these perceptions, a bipolar priority is constructed; 'Communicating belief creates trust - disbelief creates mechanical interactions'.

5.2.3.2. Initial Coding:

With consideration of the bipolar construct pairs itemised in Table 5.2.1., this conductor perceives the expert as central to the pedagogic relationship. This is demonstrated in construct pairs such as 'interaction-isolation' (Q1), 'observe responses-not notice responses' (Q3), 'able to see and understand-unable to see individual needs' (Q6) and 'better understand-nothing of herself' (Q9). The construct pairs reflect her perception of the need to understand the learner (Q2), to create a positive relationship with them, and with this communicate her belief in them 'facilitate learning–disbelief learning is possible' (Q7), and 'communicate trust and belief–breakdown trust' (Q11). She is able to convey her knowledge of both theory and practice, and to put this into action. This is articulated in 'link theory and practice-mechanical' (Q8), 'belief and understanding-not know what to facilitate' (Q12). In contrast the least competent is perceived to 'stifle learning-2-way process' (Q4). They do 'not understand the

learner' (Q5), and have a 'limited understanding' (Q10) of the role.

The articulations of this conductor sit with those of the conductor in grid 1, with respect to the application of theory into practice, and of the significance of communication as a necessary skill. Whilst the conductor in grid 1 articulates the need for personality, this conductor prioritises belief, and its impact upon the development of the relationship. The theme determined from initial coding is stated in bipolar form as 'belief impacts the pedagogic relationship-disbelief restricts learning'.

5.2.3.3. Focused Coding:

Focused coding expands the initial comprehensions, and generates greater insight into this conductor's construing. In this process of analysis, it is the categorisation, and conceptualisation of constructs that is of interest (Charmaz, 2006). This conductor scores herself weakest in the role of pedagogue, however. referring to verbatim interview notes, it is apparent that she considers herself "to be a pedagogue, communicating key concepts and understanding, enabling…….tapping into where they are coming from". She constructs a grid based upon her understanding of the

pedagogical relationship. Her belief in the individual influences her pedagogical stance, whilst trust impacts her ability to communicate with them. Communication skills and connection with the individual are seen as significant. In construct pair 1, there is recognition of the need to interact and neither isolate, nor be isolated. In pair 9 there is reference of the need to be yourself in order to communicate and be understood. These pairs link to pairs 10, 11 and 12, all of which relate to the conductor's ability to understand the individual, the pedagogical role, and the philosophical influences upon teaching. She talks about the conductor's ability to observe and to respond to observations. This generates understanding of the learner as an individual, and facilitates her ability to communicate, and so teach them. In contrast, the least competent is unable to observe. This in turn stifles learning, as the two-way dynamic in which teaching and learning occurs cannot develop.

For this conductor as a pedagogue, it is essential to both understand and believe in the individual. Belief in facilitation is articulated in construct pair 7, 'facilitate the learning process-disbelief that learning is possible'. This creates an awareness that belief in the individual is essential, and that belief in the conductor's ability to facilitate is required for

learning to take place. This is the first indication that something other than the mechanics of the profession are required to be expert.

In construct pair 8, 'linking theory with practice-mechanical without the understanding', the need for a theoretical comprehension of practice, and ability to apply it at a human level is required. This conductor believes in a theory-practice link. Her focus is upon the conductor's ability to use their understanding of the theory to motivate and inspire the learner. This links to construct pair 12 'belief and understanding-not know what to facilitate', which explicitly highlights the significance of belief and its impact upon the pedagogical relationship. Belief, theoretical knowledge, and practical application together are required in order to bring about success. Individually they do not create expert practice, but together they are perceived to be powerful. These construct pairs create insight into the purpose of the relationship with the learner; the dynamic and the potential within it to both teach and learn.

In keeping with the findings of the PCA analysis of one component, it is possible to construct one theme from the bipolar construct pairs. Qualitatively it is possible to unite

aspects of the conductor role, specific professional skills and the impact of the relationship upon the learner. A bipolar theme is generated based upon this analysis; 'conductor's belief underpins the creation of a trusting, self-actualising relationship-conductor's lack of belief creates a mechanical relationship in which the individual's vulnerability and fears are exposed'. This is further abstracted to 'belief strengthens trust-disbelief increases fear'.

5.2.4. Summary of Grid 2:

Analysis of this interview highlights the significance of the pedagogical link to expertise. With a focus upon the development of the relationship, and pragmatic application of knowledge, skill and self, this conductor presents the expert as both pedagogue and philosopher. She focuses upon the relationship with the learner and the conductor's role in creating it. Her central point relates to the expert's belief in the individual, and in their potential to learn. This takes the conductor beyond the mechanical, to the interpersonal, and is summarised in her closing sentence; "We look at children and adults with different eyes and it is the belief that is fundamental to that".

5.3. Grid 3:

5.3.1. Overview of Interview:

This, my third interview, is with a conductor who though younger than myself, has 22 years experience. This conductor works in a school setting, and at the time of the interview is responsible for the needs of the children, and the team of staff working with them. I reflect upon learning from the previous two interviews and aim to ensure that I convey my needs clearly and positively, with a view to engaging this conductor in the interview process from the beginning. With experience behind me, I am confident, however I have previously worked with this conductor, and feel that her perception of CE is different to mine. I aim to approach the interview without judgement, but at times find it challenging to communicate with her. I try hard to focus positively upon the interview.

The interview begins energetically, with the conductor initially participating positively. In spite of this positive start however, she soon appears disinterested, bored, and a little irritated with the process. Her responses become repetitive and this impacts the atmosphere. This becomes tense, and the conductor expresses her frustration at being asked what appear to be repetitive questions. This impacts upon my

confidence. I try to lighten the situation. I keep my tone upbeat, accepting, rather than probing her answers, as probing appears to increase her frustration and reduce her participation in the interview itself. As a consequence, I move promptly from one question to the next, until the interview is complete. The interview ends professionally, however I feel her relief on its conclusion. I also feel empty, and frustrated at my own inability to engage her more fully throughout the interview. On reflection however, this interview creates more opportunity for insight into conductors' perceptions of expertise than I can imagine. In particular, this interview generates insight into perceptions of experienced, rather than expert practice. I am able to shift my perception of this interview, and recognise it for its positive learning opportunity. What I at first consider as negative, in fact becomes positive.

5.3.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.3.1., whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.3.2.

Table 5.3.1.

Grid 3: Bipolar construct pairs. Those in **bold** are reversed in Figure5.3.

Emergent pole constructs	Implicit pole constructs
E1.Ineffective (passive)	**I1.Competent (active)**
E2.Wide experience	I2.Not using knowledge
E3.Clarity	I3.Confusion
E4.Trust	I4.Fear
E5.Motivator	I5.Self obsessed
E6.Knowledge of needs	I6.Unwillingness to learn
E7.Self knowledge	I7.Arrogance
E8.Enabling	I7.Prevent progress
E9.Teacher-learner	I9.Closed mind
E10.Unable to provide emotional security	**I10.Enable emotional security**
E11.Emotional attachment (EA)	I11.Inconsistency
E12.Effective communication (EC)	I12.Unwillingness to communicate

Table 5.3.2.

Grid 3: Original data: element and construct scores.

Question. No./ Element titles

Q	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	2	1	7	2	1	7	2	1	7	1	1	7
2	6	7	1	6	7	1	6	7	1	6	7	1
3	6	7	1	6	7	1	6	7	1	6	7	1
4	7	7	1	6	7	1	6	7	1	6	7	1
5	6	7	1	6	7	1	6	7	1	6	7	1
6	6	7	1	6	7	1	6	7	1	6	7	1
7	7	7	1	7	7	1	7	7	1	7	7	1
8	6	7	1	6	7	1	6	7	1	6	7	1
9	6	7	1	6	7	1	6	7	1	6	7	1
10	2	1	7	2	1	7	2	1	7	2	1	7
11	6	7	1	6	7	1	6	7	1	6	7	1
12	6	7	1	6	7	1	6	7	1	6	7	1

Using Idiogrid software, PCA analysis is undertaken. Analysis determines one component. This explains 99.67% of the variance with an eigenvalue = 11.96. As with earlier grids, the relationship between the elements and constructs is demonstrated in the 2D Idiogrid representation (Figure 5.3).

The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001), and supports the PCA findings of one component. One component suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. The elements are located on one spot, reflecting the similarity of scores (Table 5.3.2.).

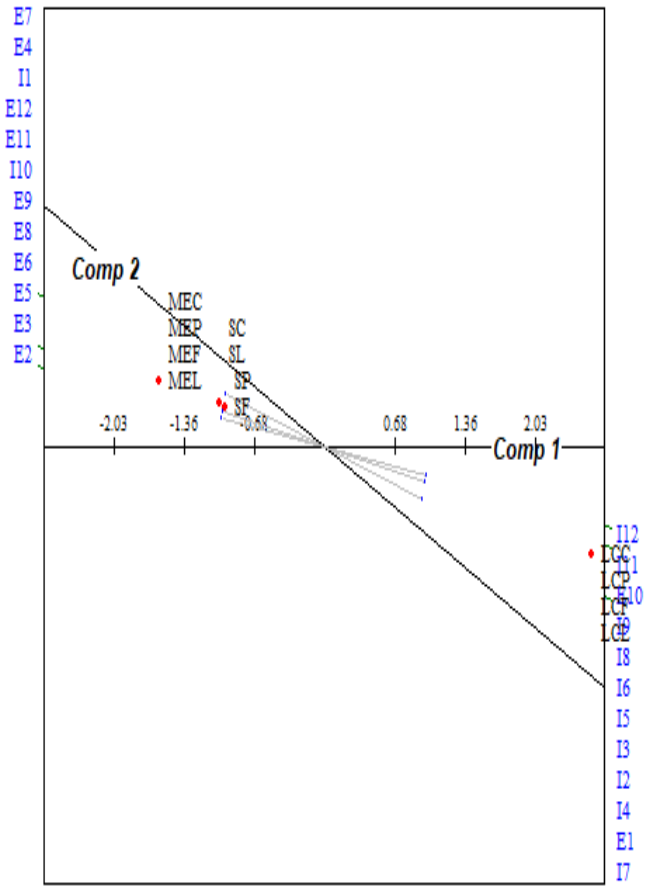


Figure 5.3. Grid 3. Idiogrid representation

5.3.3. Qualitative Analysis:

5.3.3.1. Priority:

At the conclusion of the interview this conductor prioritises the most important constructs as "self-awareness and ability to make relationships to promote learning", "using the team to facilitate learning", "using the child as a model", "being positive, seeing good in what has been done/achieved". She

recognises that CE helps her to look for “abilities”, and to be able to “make the person feel good about themselves”. Her priority is stated in its bipolar form as ‘focus on the positives, what they can do- education looks at the deficit, what they cannot do’.

5.3.3.2. Initial Coding:

With consideration of the bipolar construct pairs itemised in Table 5.3.1. this interview helps define the expert as a capable and stable professional. In contrast, the least competent is an erratic and insecure learner. Initial coding with its focus upon action, and requirement to stay close to the data, initially raises two areas for consideration. The first relates to the conductor’s ability to form a relationship with the learner. The second identifies skills required to enable learning and development. This perception is defined by the following bipolar construct pairs; ‘ability to generate trust’ (Q4), ‘emotional security’ (Q10) ‘emotional attachment’ (Q11), ‘effective’ (Q12) and ‘clear’ (Q3) communication’ (Q12). The expert conductor is required to utilise their ‘experience’ (Q2) and ‘self knowledge’ (Q7) to ‘enable’ (Q8) and ‘motivate’ (Q5) the learner. They function as a ‘teacher-learner’ (Q9), and use their ‘knowledge of the individuals’ needs’ (Q6). These constructs create an image of the expert

as skilled and interested, gaining a certain level of satisfaction from their professional role.

In contrast, the least competent conductor is perceived to be 'passive' (Q1), 'unable to use knowledge' (Q2), 'unwilling to learn' about the 'needs of the individual' (Q6) or to 'communicate' (Q12). They appear 'arrogant' (Q7), 'self obsessed' (Q5) and 'closed minded' (Q9). They are 'inconsistent' (Q11) generate 'fear' (Q4) and 'confusion' (Q3). As a consequence they are 'unable to create an emotionally safe' (Q10) environment, and restrict learning by 'preventing progress' (Q8). An initial theme for grid 3 can be stated as 'experienced- inexperienced'.

5.3.3.3. Focused Coding:

Focused coding expands the initial comprehensions, and generates greater insight into this conductor's construing. In this process of analysis, it is the categorisation, and conceptualisation of constructs that is of interest (Charmaz, 2006). Reference to verbatim notes taken from the interview makes it possible to consider the initial coding more rigorously. Focused coding is set within the context of my perception of this interview as soulless, and strengthened by my interpretation of the first bipolar construct pair;

'ineffective (passive) - competent (active)'. 'Competent' stated as the opposite of 'ineffective', seems to me to limit expectation of what is possible. In this context, 'competent' practice is likened with best practice, and so creates little opportunity for development beyond this point. If competent is used to describe 'expert', then this interview creates opportunity to understand perceptions of expertise more akin to the experienced, rather than the expert conductor. With this in mind the bipolar theme for this grid is identified as 'competent-restrictive'.

5.3.4. Summary of Grid 3:

This interview demonstrates the perceptions of expertise in the context of the experienced. This fact alone is significant. During this interview, in contrast to the previous two interviews, I am taken aback by a perceived lack of emotion, or articulated passion for CE. This forces me to consider how much I expect from myself, and from the conductors. Although I articulate my expectations of the interview process itself, I realise that in order to learn from them I must also use my personality to engage without judgement or prejudice. Although I frequently reinforce there are no correct, or incorrect answers, the subjective element of probing, to facilitate the elicitation of the construct pairs, is

the aspect that I feel I can influence. With this in mind, I must consider how I ask the questions. With recognition of how I perceive the emotional disconnect in this interview, I consider the emotional, as well as the professional knowledge and skill associated with expert practice. Whilst these subjectivities remain, reflection generates greater understanding of the need to consider expert practice in the context of experienced, rather than least competent practice. This interview expands the context of my analysis, and informs the direction of the rest of the study.

5.4. Grid 4:

5.4.1. Overview of Interview:

This British trained conductor has two years' experience. When newly qualified she was working with adolescents in a multi-disciplinary, special school setting. At the time of the interview she works with both children and adults in a sessional setting. She perceives her experiences at the special school as challenging, feeling pressured to take on more responsibility than she was ready for. In this role however, she feels more confident, and is happy to take responsibility. This conductor has the least experience of those interviewed so far. This is reflected in her responses

that appear at the time to be limited and superficial. I reflect upon the third interview, and focus more upon the facts than the articulated emotions.

Due to the conductor's work pressures, this interview, like the second, also takes place over two days. I request that she express her opinions as genuinely as possible. I take care to ensure that she does not strive to give the correct answers, rather the ones that come to her spontaneously. This approach appears to work. She answers the questions with apparent ease and speed however as stated, this appears lacking in depth. The constructs reflect her experiences in both settings. Her experience in the school setting influences her awareness of the sensory needs of learners. Her current experience influences her perception of the need to connect with the learner in order to teach applicable skills, rather than the tasks and movements themselves. In general, she scores herself around the mid-point (3-5) (Table 5.4.2.), and never scores herself either as 7/1. Whilst other conductors identify more readily with the ME conductor, she finds it easier to relate to the LC elements, and relates most confidently to the role of facilitator, in contrast to that of leader. This appears

appropriate given her limited professional experience and junior status.

5.4.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.4.1. whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.4.2.

Table 5.4.1.

Grid 4. Bipolar construct pairs. Those in **bold** are reversed in Figure 5.4.

Emergent pole Constructs	Implicit pole Constructs
E1.Not able to form a relationship	**I1.Able to form relationship**
E2.Ability to explain	12.Not able to teach
E3.Non verbal communication cues used	I3.Not responding to the non-verbal cues
E4.Giving a meaningful explanation	I4.Inability to adapt the explanation
E5.Reach each individual within the group	I5.Lose the individual within the group
E6.Not looking at the whole person	**I6.Looking at the whole person**
E7.Not adapting to individual need	**I7.Adapting teaching for individual need**
E8.Teaching to facilitate application	I8.Teaching without the application
E9.Creation of emotional safety	I9.Physically safe environment
E10.Not using sensory cues	**I10.Listening and responding to sensory cues**
E11.Use of emotional personality to create positivity	I11.Mechanical presentation
E12.Not using sensory cues t support the leader	**I12.Using and acting upon sensory cues to create support**

Table 5.4.2.

Grid 4: Element/ construct scores.

Question No. / Element Titles												
Q	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	3	1	6	3	1	5	4	1	6	3	1	6
2	4	7	3	5	6	2	3	7	1	3	7	1
3	5	7	1	6	7	2	4	6	2	6	7	3
4	4	7	2	4	7	3	4	7	2	5	7	3
5	6	7	3	5	7	2	5	7	1	6	7	1
6	3	1	6	4	1	7	5	1	7	3	1	7
7	4	1	7	4	1	7	5	1	7	4	1	7
8	5	7	1	5	7	3	5	7	1	4	7	1
9	5	7	3	6	7	1	4	7	1	6	7	1
10	3	1	6	2	1	7	4	1	7	3	1	6
11	5	7	3	6	7	2	4	7	1	5	7	1
12	3	1	7	2	1	7	4	1	7	2	1	7

Using Idiogrid software, PCA analysis is undertaken. Analysis determines one component. This explains 88.90% of the variance with an eigenvalue = 10.67. As with earlier grids, the relationship between the elements and constructs is demonstrated in the 2D Idiogrid representation (Figure 5.4). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component. One component suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid.

This conductor scores herself more moderately than others. This is reflected in Figure 5.4 below, with Self elements centred around the middle, rather than closer to either the ME or LC elements.

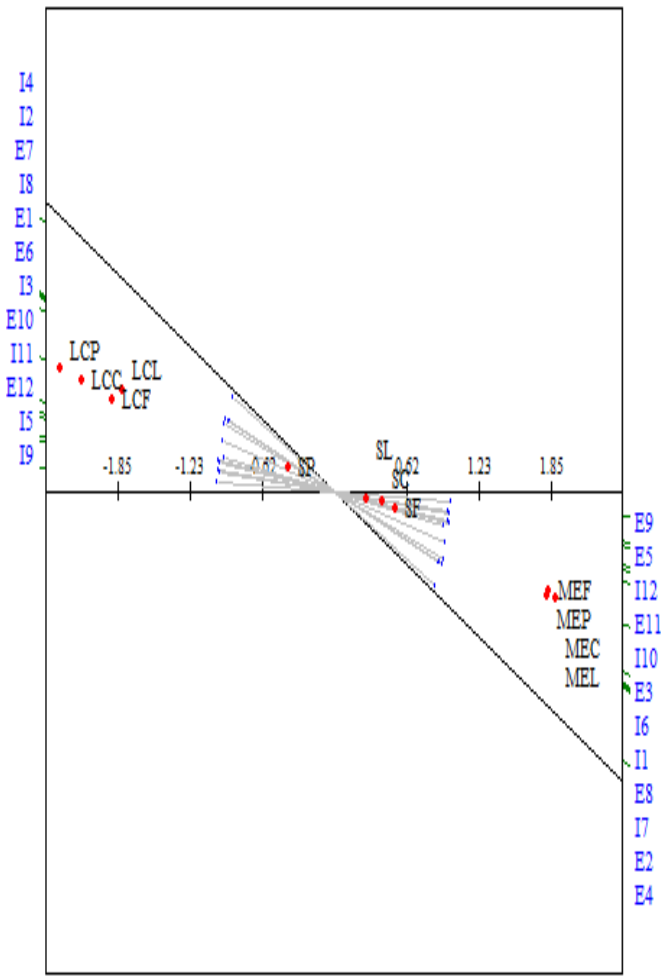


Figure 5.4 Grid 4:Idiogrid representation.

5.4.3. Qualitative Analysis:

5.4.3.1. Priority:

At the end of the interview this conductor identifies her priority as the ability to "focus on the individual needs, making teaching specific to them and application of teaching for their own needs". In contrast, there is "no application, just a mechanical" approach. As with conductors in grids 1 and 2, there is a need for the expert to create a meaningful relationship. This impacts, and is impacted by, the conductor's ability to observe and interact at a personal level. The priority is summarised as 'application of teaching to address individual need-mechanical, no application of learning'.

5.4.3.2. Initial Coding:

In contrast to earlier interviews the bipolar construct pairs are detailed and specific (Table 5.4.1.). For her there is a strong focus upon the conductor's ability to connect with the individual (Q1, 3, 5, 6, 11). For instance 'able to form relationship-unable to form relationship' (Q1), 'reach the individual-lose the individual' (Q5) and 'create positivity-mechanical' (Q11). She perceives it is important for the expert to respond to the individual's sensory needs. This is expressed in construct pairs 9, 10, 12, and stated for

example as ‘create emotional safety-physical safety’ (Q9). For her teaching equals explanation, (Qs2& 4), ‘ability to explain-not able to teach’ (Q2), whilst her perception and understanding of the role as pedagogue relates to the ability to see the individual, to connect with, and enable learning to be applicable to everyday life (Qs7& 8). This is stated as ‘teach application-teach without application’ (Q8). Initial coding creates an impression of a conductor with a perception of expertise that is heavily focused upon teaching, on picking up non-verbal and sensory information. Whilst she is aware of the need to work with the group, her inexperience restricts her connection at an individual level. An initial theme for grid 4 can be stated as ‘able to address individual sensory needs-unable to create emotional safety’.

5.4.3.3. Focused Coding:

Recognising the significance attached to the relationship with the learner, this conductor articulates the role of the “communicator impacting on the facilitator role” (Q1). She values the emotional and sensory elements of the relationship, and recognises their significance upon both teaching and learning. For her the “emotional personality” of the conductor is important in “creating positivity”, and “emotional (as opposed to physical) safety was significant”

(Q9). She feels at times that this might become "false" as a consequence of "trying too hard". For her it is essential to connect; "tapping into the learner, what makes them tick" (Q1). She does not want to make them feel that she is "picking on them", but that all interaction enables development of an "appropriate relationship" (Q1). In Q2 "the best leaders are the best teachers-explaining to fit the needs of the person". She feels it is important to understand the individuals' non-verbal cues; their facial expression, their eyes and body language (Q3), all of which would indicate understanding (Q4). For her, understanding the individual informs her responses, and enables her to feel that she is able to create an appropriate relationship. For her, learning is something that should be "fun and laid back, without pressure" (Q5). The "pedagogue would always be an expert communicator" (Q5), and it is important for her that there is a "safe environment for everyone" (Q9). It is important that the individual, the group and the conductor "felt safe and willing to try new things". In connection with this, she refers to the conductor team, "using yourself to bring out the participants and conductors working with you" (Q11). Observation of the individual enables the expert to know if their communication is appropriate (Q3). She links the sensory cues with the expert's ability to observe and "use

them to support the leader…and the group" (Q12). In contrast, the least competent will "not use them (sensory cues) to create safety" and can't translate the observation into action" (Q3). The expert however is able to "pick up the whole environment and respond" (Q10). The non-verbal cues facilitate the learning process, and enable the expert to adapt the explanation (Q4), as it is "different for each person" (Q8). In this way, "they can take the learning with them" (Q9). The expert can adapt the teaching to facilitate the "application", as without it "teaching is just a task" (Q2). The least competent will "teach the skill but not adapt" (Q8).

The theme of application runs through the whole interview. She articulates that the conductor has to "look at the whole person and the application of the skills" (Q8), as opposed to "teaching a skill, but not the adaptability". She articulates that "some people need the explanation….taking something from the session that they can then apply - different for each person…not just the physicality, bigger than the mechanical. It's not mechanical-learning, problem solving adaptability". Whilst personality is mentioned, reference to it, unlike the conductors in grids 1 and 2, is limited. For this conductor personality is positive and genuine, in contrast to a "falseness" as a consequence of "trying too hard" (Q11).

The bipolar theme for this grid is summarised as; 'Use of the sensory to create an emotionally safe environment in which learning can take place-the creation of a physically safe environment devoid of emotion'. When linked to the priority this can be further summarised to 'sensory awareness creates emotional safety–inability to observe increases mechanical response'.

5.4.4. Summary of Grid 4:

This conductor focuses most upon the expert's ability to make the individual feel safe. The constructs highlight the sensory and emotional needs of the individual, as she expresses a need, and desire to connect with the individual. This interview reflects the perceptions of the novice conductor, and further develops understanding of the non-expert conductor.

5.5. Grid 5:

5.5.1. Overview of Interview:

At the time of the interview this 27-year-old British-trained conductor is on maternity leave. She has been working in a multi-professional special school setting since qualifying five years previously. This experience gives her a unique

perspective on conductive practice, and the conductor role. She seems aware of the bigger picture, of the need to consider the group, and in comparison to the conductor in grid 4, the whole team in the decisions she makes. This conductor perceives herself strongest in the role of leader.

5.5.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor are itemised in Table 5.5.1., whilst the rating scores for each element, against each bipolar construct pair is shown in Table 5.5.2.

Table 5.5.1.

Grid 5: Bipolar construct scores. Those in **bold** are reversed in Figure 5.5.

Emergent pole Constructs	Implicit pole Constructs
E1. Not aware of what's going on	**I1.Being aware**
E2. Knowing the participant	I2.Lack of knowledge of situation
E3. Appropriate response to other conductors and participants	I3.Least thought out response
E4. Able to bring everything together	I4.Mechanical
E5. Effectively getting what you want	I5.Being inconsistent
E6.Lack of knowledge	**I6.Building on knowledge**
E7. Anticipation of what's needed	I7.Blinkered
E8. Everything about the conductor facilitates learning	I8.Teaching is done in isolation
E9. Consistent expectation	I9.Unclear expectation setting
E10. Can't bring together all the parts	**I10.Make best use of all the information at hand**
E11. Observation of the dynamics and the response to those observations	I11.Not noticing the subtle and so not responding
E12. Effective with a range of facilitation	I12.Physical facilitation only

Table 5.5.2.

Grid 5: Element/ construct scores.

Question No. / Element Titles												
Q	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	2	1	7	2	1	7	2	1	7	2	1	7
2	6	7	1	6	6	1	6	7	1	6	7	1
3	7	7	1	6	7	1	7	7	1	6	7	1
4	7	7	1	7	7	2	6	7	1	6	7	4
5	7	7	1	7	7	1	6	7	1	7	7	2
6	1	1	7	2	1	7	2	1	7	2	2	7
7	7	7	1	6	6	1	6	7	1	7	7	1
8	6	7	1	6	6	2	6	7	1	6	7	1
9	6	7	1	7	7	1	6	7	1	6	6	2
10	1	1	7	1	1	6	2	1	7	2	2	6
11	7	7	1	6	6	1	6	7	1	6	6	2
12	7	7	1	7	7	1	7	7	1	6	6	4

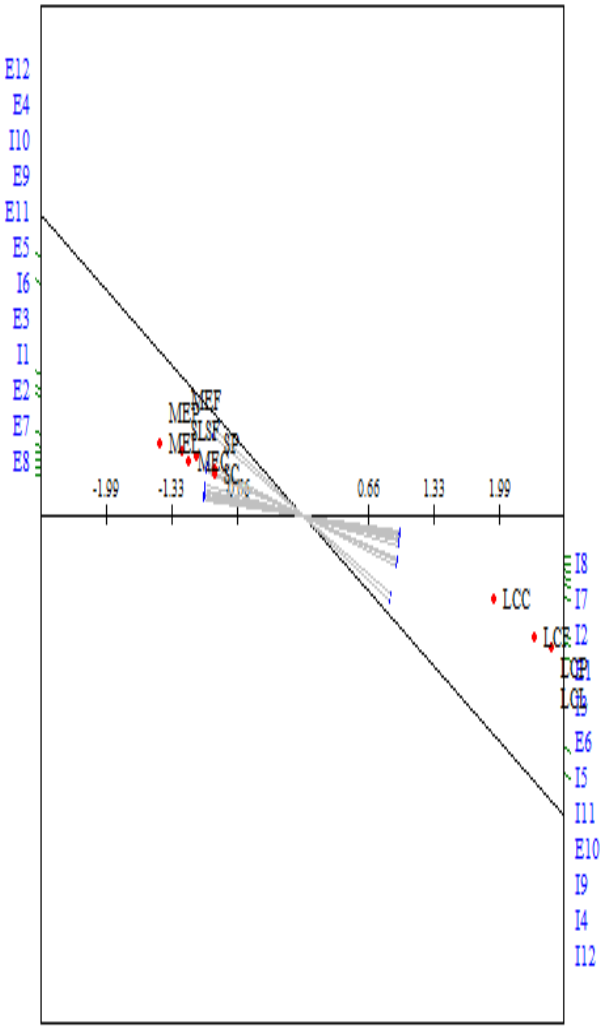


Figure 5.5 Idiogrid representation of Grid 5.

Using Idiogrid software, PCA analysis is determines one component. This explains 93.04% of the variance with an eigenvalue = 11.16. As with earlier grids, the relationship between the elements and constructs is demonstrated in the 2D Idiogrid representation (Figure 5.5). The axes are acute,

with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component, which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. The ME and Self elements are grouped together, reflecting this conductor's perception of herself as closer to the ME in all roles.

5.5.3. Qualitative Analysis:

5.5.3.1. Priority:

The priority for this conductor focuses upon the use of personality; "everything about the conductor facilitates learning……linking all of the parts together….their personality and awareness - more open personality". In contrast a closed personality is "blinkered" and will 'narrow' down achievement. The bipolar priority is summarised as: 'open personality to facilitate learning-blinkered focus narrows achievement'.

5.5.3.2. Initial Coding:

The constructs articulated in this interview (Table 5.5.1.) highlight aspects of the conductor-learner relationship (Q2), and the conductor's ability to bring everything together (Qs1, 4 & 10). This reflects her perception of the detail and the bigger picture. For this conductor, application of the conductor's personality underpins successful application of their skills; observation (Q11), facilitation (Q12), expectation (Q9), anticipation (Q7), awareness (Q1), responsiveness (Q3), and knowledge of the individual (Q2). This impacts their ability to "know and guide" the individual (Q2), observe and respond thoughtfully (Q3), anticipate (Q7) and motivate. In this way learning is facilitated (Q8). The need for knowledge, practical, experiential and theoretical, is recognised, whilst practical experience alone is considered insufficient.

5.5.3.3. Focused Coding:

The expert's role is to ensure "learning in every opportunity" (Q8) and to "make best use of all the information at hand" (Q10). Similarly, her understanding of the impact of communication means that it is essential that a "wide range of communication methods" are used, in order to be "effective and consistent" (Q11). As part of this, in the context of the conductor in grid 4, where sensory awareness

is acute, this conductor articulates that an ability to be "intuitive" (Q8) is important, however she feels that it is "something you can learn".

With reflection upon her experience in the multi-professional team, she articulates that the "leader and facilitator are almost opposite roles"(Q2). The facilitator supports the leader, the individual, and the whole group (Q4). The expert leader observes the whole group (Q7), knows the individuals' aims (Q8), and anticipates what is needed throughout (Q7). She perceives facilitation to be central to the conductor's role regardless of the context.

In contrast, the least competent conductor is "blinkered" (Q7). They "would only see what's going on in one small part at a time and not be able to observe what's happening as a whole". This impacts upon their responses and their effectiveness (Qs3& 11). Lack of awareness and "inconsistency" (Q5), a tendency towards the use of "physical facilitation only" (Q12), and a "mechanical" (Q4) approach restricts their ability to "bring everything together" (Q4). They will notice only the "obvious and explicit" and will be unable to "bring together all the different parts of knowledge that they have in order to competently work in the group"

(Q10). This description to some extent fits the perception of the conductor in grid 4, who was unable to fully address the needs of the whole group, or indeed of the whole individual.

She is keen to articulate the need to be able to "get the best out of the participants in the group". She suggests that use of physical facilitation only will be insufficient to achieve this; 'being able to bring everything together-mechanical' (Q4). Her focus is upon ensuring learning opportunities throughout the day, an ability to use a "variety of facilitation" as opposed to "physical facilitation" (Q12) and an ability to respond immediately (articulated at the end of the interview) and intuitively (Q8). The ability to use all the methodological tools to achieve what she wants (Q5) is essential, as is the development of experiential (Q6) knowledge. The least competent conductor functions at a basic level, unclear as to what to observe for, or respond to. They set low and inconsistent expectations (Q5), and are unable to connect with the learner or apply their knowledge to facilitate learning. Consequentially, they block the development of the relationship.

From this interview, it is possible to construct an image of the expert as someone who knows what they want and how

to achieve it. By using their observation and knowledge they are able to respond to subtle information dynamically, and to achieve success. The theme for grid 5 is; 'holistic approach to the pedagogic role–individualised, mechanical application of knowledge'. This is further abstracted to 'holistic-fragmented'.

5.5.4. Summary of Grid 5:

The interview gives insight to the impact multi-professional experience may have upon a conductor's perceptions of expertise. There is reference to the wider team, and a focus upon learning and development within the group, which includes her colleagues and peers. Her constructs reflect her practical experiences; being the leader, anticipating and thinking for others, allowing them to develop the individual relationship, whilst she considers the needs of the whole group. Her reality is different to the previous four conductors. As a conductor in a multi-professional school setting, she has little experience of working with a team of conductors. This grid creates an understanding of the skills and personal characteristics perceived to be essential to facilitate learning in the multi-professional school situation. It also to some extent explains some of the perceptions of the conductor in

grid 4, as she struggles to gain confidence within such a complex workplace environment.

5.6. Grid 6:

5.6.1. Overview of Interview:

This Hungarian-trained conductor has been qualified for 17 years 11 months. As a senior conductor, she works with nursery and school aged children in a CE centre. This interview is the first of four to be completed on the same day, in the same CE centre. This conductor is excited and positive about participating in the research. Although quiet and calm, she appears to enjoy the experience, smiles frequently and talks positively.

This interview highlights the perceived potential of the professional team, and the impact this can have upon the expert's role. This conductor's perception of expert extends beyond the group situation, to relationships within the wider professional context. She articulates her thoughts regarding her ability to deal with difficult and challenging situations. However, she feels that she belongs to the professional team, and that this belonging plays a significant role in her professional development. These are new insights to

expertise, and expand understanding of the wider professional context.

There are times when she talks negatively about these challenging situations. It is not always appropriate to probe at these times, either because it disrupts the flow of the interview, or I fear that probing will take the direction away from the interview itself. As a consequence, it is not always clear if she considers conflict positively or negatively. The main learning from this interview, however, is that this conductor perceives expert practice to relate to the conductor as a person, not just a professional. This impacts the team, the group and the individual learner.

5.6.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor are itemised in Table 5.6.1., whilst the rating scores for each element, against each bipolar construct pair is shown in Table 5.6.2.

Table 5.6.1.

Grid 6: Bipolar construct pairs. Those in **bold** are reversed in Figure 5.6.

Emergent pole constructs	Implicit pole constructs
E1.Lack of training	**I1.Well trained**
E2.Well educated	I2.Not enough support
E3.Lots of experience (environment)	I3.Not having an environment in which they can thrive
E4.Patience	I4.Urgency-do it now
E5.Good leader	I5.Poor communicator
E6.Not willing to learn	**I6.Willing to learn**
E7.Being able to use the team	I7.Not able to use the resources
E8.Able to teach & learn	I8.Not recognising the need to learn
E9.Not confrontational	I9.Confrontational
E10.Get own way and not listening	**I10.Patience to develop relationship and trust**
E11.Experiential learning	I11.Not caring/Mechanical
E12.Development of professional practice	I12.Not recognise the need to develop

Table 5.6.2.

Grid 6: Element and Construct Scores.

Question No. / Elements Titles												
Construct	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	1	3	3	1	1	7	1	1	7	3	3	3
2	6	6	3	7	7	3	5	6	3	5	5	3
3	7	7	1	7	7	1	7	7	1	6	7	1
4	7	7	2	7	7	1	5	7	2	5	6	2
5	6	7	2	7	7	1	5	6	3	5	7	1
6	1	1	7	1	1	7	1	1	7	1	1	7
7	6	7	1	7	7	1	6	7	1	6	7	1
8	6	7	1	7	7	1	6	7	1	6	7	1
9	7	6	1	7	6	1	7	6	1	7	6	1
10	1	2	7	1	1	7	1	1	7	2	1	7
11	7	7	1	7	7	1	7	7	1	7	7	1
12	6	7	1	7	7	1	7	7	1	7	7	1

Using Idiogrid software, PCA analysis determines one component. This explains 92.58% of the variance with an eigenvalue of 11.11. As with earlier grids, the relationship between the elements and constructs is demonstrated in the 2D Idiogrid representation (Figure 5.6). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. This conductor perceives herself weakest as pedagogue (SP) and strongest as facilitator (SF). This is reflected in Figure 5.6 in which SP is closer to the centre, with SF further away from it.

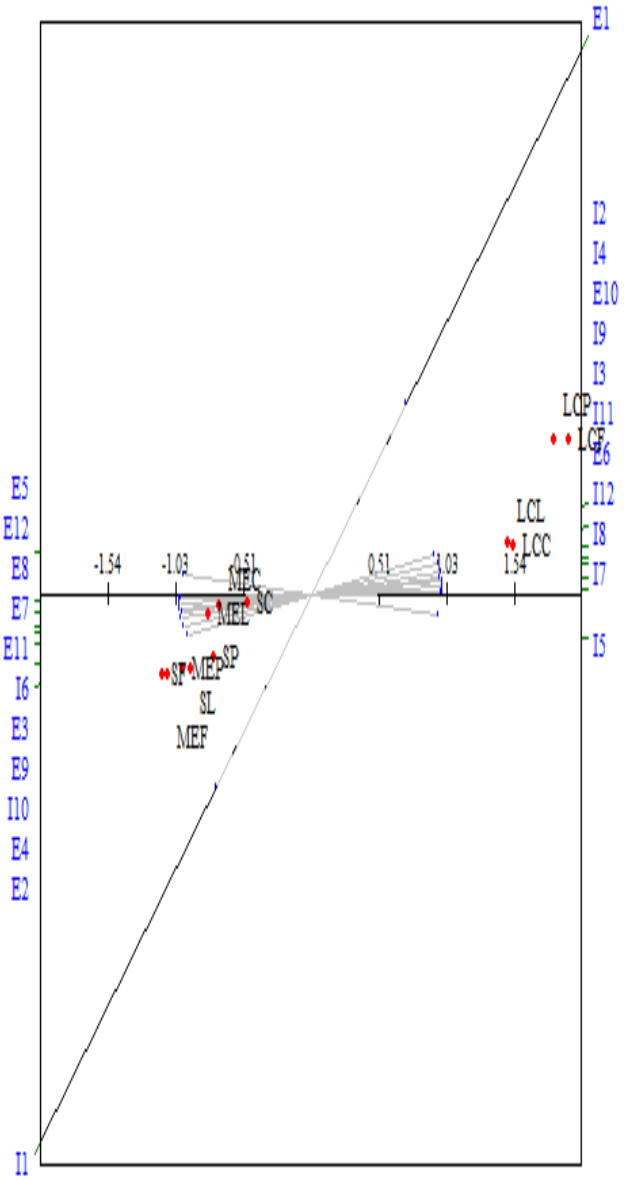


Figure 5.6 Grid 6. Idiogrid representation.

5.6.3. Qualitative Analysis:

5.6.3.1. Priority:

This conductor prioritises the conductor as central within in the team. Part of this centrality is the conductor's desire and ability to continue learning. This is expressed as "lifelong learning–for conductor as much as the child". Whilst she recognises and values the team she works in, she also realises that it is possible for the conductor to "isolate themselves even within a team". She perceives that the conductor must have the desire to maximise opportunities for learning. However, if the team is not willing to assist in this development then she feels that the responsibility for this failure belongs to the team, not just the individual conductor. The team is perceived in the wider sense relating to the professional organisation; "You can work alone but not in isolation-use of CEPEG" (CE Professional Education Group/PCA).

The bipolar priority for this grid is articulated as 'ability to work in, and learn from the team-isolation and inability to use the team to facilitate personal and professional development'. This is abstracted to 'team player-isolationist'.

5.6.3.2. Initial Coding:

The bipolar construct pairs (Table 5.6.1.) highlight the perceived skills and abilities of the expert, in the context of the team. This conductor recognises that the expert leader needs good communication skills (Q5), is patient (Qs4& 10), and non-confrontational (Q9). She also recognises that the expert needs to be willing (Q6) to learn (Q12), to train (Qs1& 2) and to teach (Q 8). They also need to use experience (Qs3& 11) as well as the team (Q7).

5.6.3.3. Focused Coding:

In a similar way to the conductor in grid 5, she perceives the role of leader as the opposite of the pedagogue role. She articulates; "leading is a skill - not learnt from books" (Q5). For her "a good leader is not just in the session, not a job role…it is about them as people, not the job they do" (Q11). The constructs reinforce the need not only for experience and knowledge, but the desire for continued learning and development. Expert practice is perceived to relate to individual development at both professional and personal levels. Observing others facilitates on-going continuous feedback, and increases experiential learning opportunities. Good communication is considered essential for the development of expert practice, both in and outside the group. The development of a trusting relationship is central

to everything they do, communicating caring and challenge without confrontation. As identified, conflict is considered both positively and negatively. She recognises that it is important to "know how to work without fighting……that there is a need to create partnership, otherwise the children lose out" (Q9). At the end of the interview she articulates; "think sometimes need to be confrontational - need to know when to be and when not to be".

The least competent is perceived to have a reluctance to develop professionally, and apply knowledge, which is at best mechanical. They are perceived to be both urgent and selfish, they create tension, lack care or the desire to listen. These characteristics negatively impact relationships and learning, their own as much as the individual's. The theme for this grid is summarised as 'a desire for lifelong learning has positive impact upon the team dynamic- mechanical, isolationist perspective restricts learning and development'. This can be further abstracted to 'holistic approach to lifelong learning-isolationist prevents learning'.

5.6.4. Summary of Grid 6:

This grid highlights new perceptions. In contrast to earlier interviews, there is greater reflection on the expert as a person within the team, however neither specific skills nor

aspects pertaining to the relationship with the learner are specified. This grid serves to highlight the impact of the leader, and of the whole environment upon the team, and the learner. The priority relates to the expert's desire and ability to function as part of the team, considered more significant than the needs of the individual.

5.7. Grid 7:

5.7.1. Overview of Interview:

This Petö-trained, Hungarian conductor qualified 7 years 10 months previously. She works with school-aged children, and is the second of four conductors to be interviewed on the same day in the same CE centre. She articulates passion and desire to learn and develop. Although this conductor does not state her age, she is younger than the previous conductor, and appears more hesitant, and self-conscious about her use of the English language. Regardless of her concerns there are no difficulties from my perspective. I find that she is able to express herself both verbally and non-verbally. She speaks well and articulates fact and emotion with clarity. She processes and responds to the questions competently. She reflects insight into her own behaviour. She understands the research method and gives thought to her answers and rating of elements. Learning especially from grid 3, I

deliberately do not anticipate a similarity of thinking between the four conductors working in the same team (grids 6- 9). This works well. This interview reflects a focus upon the team, and the conductor as both an individual and a professional.

5.7.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.7.1., whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.7.2.

Table 5.7.1.

Grid 7. Bipolar construct pairs. Those in **bold** are reversed in Figure 5.7.

Emergent Pole Constructs	Implicit Pole Constructs
E1.Poor communication	**I1.Good communication**
E2.Simple, direct communicator	I2.Over think communication
E3.Clear instructions to hold the group together	I3.Not clear instructions
E4.Willingness to learn	I4.Not care about professional development
E5.Willingness to teach & learn	I5.Unwillingness to teach and learn
E6.Not responding to others	**I6.Responding adequately to others**
E7.Being able to see the bigger picture	I7.Think you've seen it all
E8.Confidence	I8.Lack of interest to develop
E9.Give clear expectations	I9.Not being organised
E10.Not give confidence	**I10.Give confidence to others**
E11.Use both verbal and non-verbal communication	I11.Not care about linking verbal and non-verbal
E12.Honest and convincing communication	I12.Not listening

Table 5.7.2.

Grid 7: Question No. /Element roles

Construct	SL	MEL	LCL	SF	MEF	LCF	SP	MEP	LCP	SC	MEC	LCC
1	3	1	7	3	1	7	2	1	7	3	1	7
2	5	7	1	4	7	1	5	7	1	6	7	1
3	5	7	1	4	7	1	4	7	1	5	7	1
4	7	7	1	7	7	1	7	7	1	7	7	1
5	7	7	1	7	7	1	7	7	1	7	7	1
6	3	1	7	2	1	7	3	1	7	3	1	7
7	4	7	1	4	6	1	5	7	1	4	7	1
8	4	7	1	6	7	1	4	7	1	4	7	1
9	5	7	1	5	7	1	6	7	1	4	7	1
10	1	1	7	1	1	7	2	1	7	3	1	7
11	7	7	2	7	7	1	7	7	1	5	7	1
12	5	7	1	7	7	1	5	7	1	4	7	1

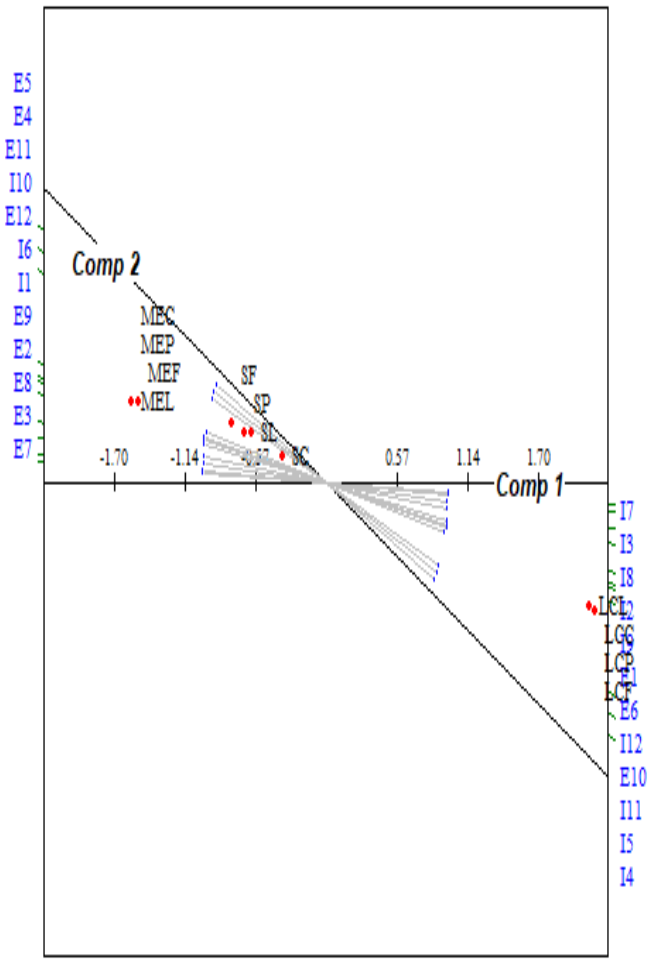


Figure 5.7 Grid 7: Idiogrid representation .

Using Idiogrid software, PCA analysis determines one component. This explains 89.90% of the variance with an eigenvalue = 10.79. As with earlier grids, the relationship between the elements and constructs is demonstrated in the 2D Idiogrid representation (Figure 5.7). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. As with earlier grids, the ME and LC elements are located more closely to the emergent and implicit poles. In a similar way to the conductor in grid 4, this conductor scores herself more towards the midline. This is reflected in Figure 5.7 with the Self elements towards the middle of the figure.

5.7.3. Qualitative Analysis:

5.7.3.1 Priority:

This conductor articulates her priority as "willingness to learn, to link your thoughts with actions in an honest and convincing way". In contrast the opposite is described as "not being interested, not caring about improving professionally". This is articulated in the context of developing "confidence to teach and share knowledge". This bipolar priority is summarised as 'volition to develop professional expertise-no motivation to change or develop the pedagogical role'.

5.7.3.2. Initial Coding:

With reference to Table 5.7.1, the expert confidently uses their personality (Q10) motivates and uses the group, communicates (Qs1, 2& 11) their expectations (Q9) clearly (Q3) with straightforward, honest instructions (Q12) and information. They respond to others (Q6) with confidence (Q8). They are willing to learn (Qs4& 5). They are able to see the bigger picture (Q7).

5.7.3.3. Focused Coding:

The detail within the constructs links the conductor's personality to their desire and willingness to learn about the individual, as much as it does their professional

development. There is little about level of skill, rather about the volition to develop, to be organised, and to communicate with others so they can learn. There is a need to create an honest and cathartic relationship in which both sides can articulate and express themselves. She articulates that in order to "direct a group you need good communication skills… good team work, need to look after your team both in and out of the session" (Q3). This is in contrast to "disorganisation, not holding the group together". The expert is able to use both verbal and non-verbal skills with effect, and can use "shades of English language" (Q11). They have confidence to create an environment in which difficult issues can be discussed (Q5). This creates opportunity to communicate both in the group situation and within the team.

She articulates her thoughts clearly during the interview, however she feels she struggles with communication generally. She talks about her own development, and about how she consciously tries to link her facial expression with the words she articulates. She knows there are times when these do not match, and tries to develop her communication skills so that "instructions can be followed" (Q2). She feels that confidence is important to ensure "good communication

- convincing, honest, direct and straightforward" (Q12). The constructs and interview data unite the personal and professional. In particular, this is demonstrated in this conductor's desire and willingness to be the best she can be, to continue learning and developing. The theme for this grid is summarised as 'desire to learn and to lead learning- defensive use of communication skills restricts learning'.

5.7.5. Summary of Grid 7:

This interview highlights the impact of individual motivation and teamwork upon perceptions of expertise. The expert is perceived to bring their desire and ability to learn to the team. They want to develop and are interested in the bigger picture. This influences their ability to communicate and lead learning, and is lived out in the conductor's expression of her own motivation; "a self drive to improve-never be satisfied with own skills, with safe boundaries….(desire to) be confident, teach and share knowledge" (at end of interview). The implication within this interview is that skills can be learnt. If motivation is used as the catalyst, it is possible to convert the innate desire to learn and develop towards that of expert. This has potential to influence the group and the wider team. There is recognition that professional development requires individual motivation, and team support. It is now

possible to consider expertise, in relation to the individual, the professional group and the team.

5.8. Grid 8:

5.8.1. Overview of Interview:

This is the third of four consecutive interviews at the same CE centre. This Hungarian-trained conductor is 31 years old and works with both children and adults. She qualified 8 years 10 months previously and appears less confident than the previous interviewee. She gives less eye contact, and it takes her some time to engage with the interview process. I feel that she finds it hard to express herself fully, and gives what she perceives to be the correct answers throughout. As with the previous interview, this conductor scores herself more towards the mid-range rather than expert (Table 5.8.2), and perceives herself strongest in her role as communicator. In the context of the articulations of other conductors, in particular grid 3, this interview appears to generate understanding of the expert in the context of the experienced, rather than the expert conductor.

5.8.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor are itemised in Table 5.8.1., whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.8.2.

Table 5.8.1.

Grid 8: Bipolar construct pairs. Those in **bold** are reversed in Figure 5.8.

Emergent pole constructs	Implicit pole constructs
E1.Not having enough knowledge	**I1.Having knowledge (personal and theory)**
E2.Responsive	I2.Hesitant
E3.Individualising the general	I3.Lack of consideration of the individual
E4.Not wanting to teach	**I4.Teaching**
E5.Effective teaching	I5.Ineffective teaching
E6.Not know what to communicate	**I6.Effective guiding**
E7.Confidence	I7.Uncertainty
E8.Encouraging	I8.Disrespectful
E9.Adapting 'who you are' to the situation	I9.Not see the need or how to adapt
E10.Lack of willingness to teach	**I10.Willingness & knowledge**
E11.Understandable explanation	I11.Doesn't know what they are talking about
E12.Complex understanding of need	I12.Not understanding the complexity of the situation

Table 5.8.2.

Grid 8: Question No./Element titles.

Construct	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	3	1	7	3	1	7	3	1	7	2	1	7
2	6	7	1	5	7	1	5	7	1	6	7	1
3	5	7	1	5	7	1	5	7	1	5	7	1
4	3	1	7	2	1	7	3	1	7	2	1	7
5	5	7	1	6	7	1	5	7	1	6	7	1
6	3	1	7	2	1	7	2	1	7	3	1	7
7	6	7	1	6	7	1	5	7	1	7	7	1
8	7	7	1	7	7	1	7	7	1	7	7	1
9	7	7	1	7	7	1	7	7	1	7	7	1
10	2	1	7	2	1	7	2	1	7	2	1	7
11	5	7	1	6	7	1	5	7	1	5	7	1
12	6	7	1	6	7	1	6	7	1	6	7	1

Using Idiogrid software, PCA analysis determines one component. This explains 93.84% of the variance and an eigenvalue = 11.26. As with earlier grids, the relationship between the elements and constructs is demonstrated in the 2D Idiogrid representation (Figure 5.8). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach et al., 2001). This supports the PCA findings of one component. One component suggests a reduced level of cognitive complexity. These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. This conductor perceives herself as weakest as pedagogue. This is reflected in the Figure 5.8 below in which SP is closest to the middle.

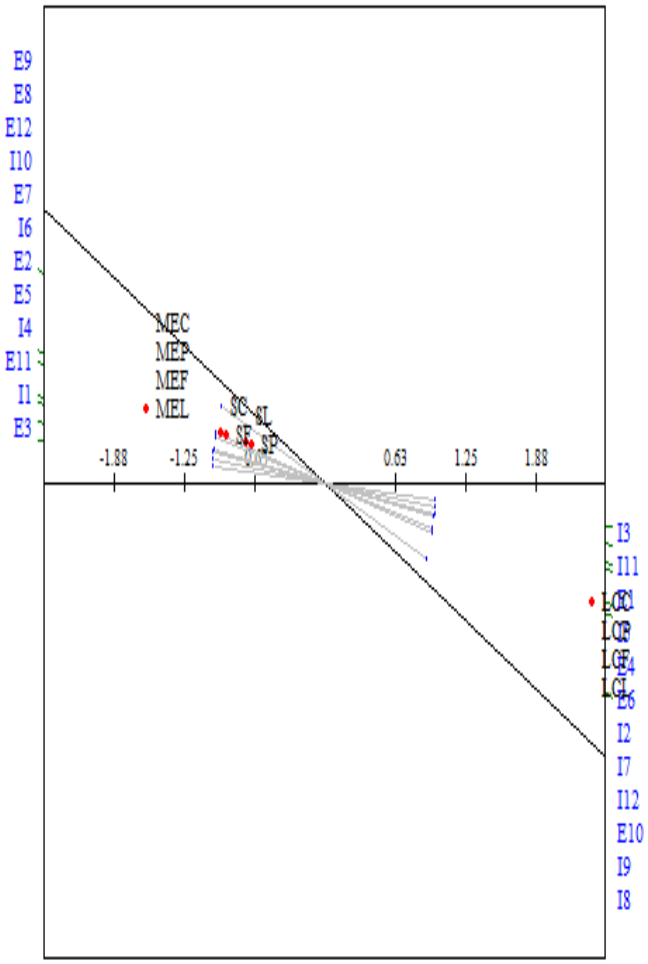


Figure 5.8 Grid 8 Idiogrid representation.

5.8.3. Qualitative Analysis:

5.8.3.1. Priority:

The priority identified at the end of the interview is articulated as "willingness; want to know more, enjoy learning from others". The opposite of this is articulated as "not being interested at all, either in people or how to

(learn)". This can be abstracted to 'willingness to learn-disinterested'

5.8.3.2. Initial Coding:

The constructs articulated by this conductor (Table 5.8.1) focus upon teaching and the facilitation of learning. During the interview, the roles of pedagogue and communicator are described. The pedagogue is a teacher who has both personal and theoretical knowledge (Qs1,3,4,5, 7,8,9,10,11& 12). They know what and how to teach, and give clear, effective explanations. They understand the complexity of the situation and the needs of the individual. They encourage the learner, and adapt to the situation. In response to Qs 2 and 6, the expert conductor guides the individual and is responsive to them. In contrast, the least competent conductor is hesitant, disrespectful, and lacks the skills and comprehension to communicate effectively.

5.8.3.3. Focused Coding:

There appears to be a generic, rather than a detailed comprehension of the role of the expert as pedagogue. The expert is described as willing and effective, but this is context-free. There is little reference to the expert's personality, rather a requirement for flexibility and adaptability. She appears a little uncertain of the role and

skills of the pedagogue; 'teaching-not wanting to teach' (Q4), and links pedagogy with the "curriculum and education" (Q5). There appears to be an inherent lack of confidence reflected; 'encouraging-disrespectful' (Q8), 'effective guiding-not know what to communicate' (Q6), 'willingness and knowledge-lack of willingness to teach' (Q10). Whilst these constructs can be seen positively, they suggest a limited understanding of how to adapt teaching to fit the needs of the learner. In a similar manner to grid 3, these constructs appear to restrict practice to what is known. There is a desire to be respectful, but almost a hesitancy to push herself and the learner further. There is a need for knowledge and an ability to know how to use it to improve teaching. There is also acknowledgement of the need for understanding, but of what exactly is unclear. The image created is of a conductor who is unsure of their role or how to achieve and develop it, but who desires the ability to teach 'effectively' (Q5), and understand the complexity of the situation (Q12). She expresses the need to 'adapt who you are' (Q9) and the need for knowledge, 'not just theory' (Q1), but is unable to elaborate on her thinking. The least competent conductor shows neither interest nor understanding of the individual or their situation. They appear reluctant to learn or adapt their role to increase learner confidence and appear uncertain of

what they should be teaching. They have insufficient knowledge. The theme for grid 8 is stated as 'willingness to use experience and knowledge to teach–unwilling to learn how to teach'.

5.8.4. Summary of Grid 8:

It appears difficult for this conductor to express her understanding of the pedagogical role, or identify the skills and knowledge required to facilitate learning in greater detail. This grid expands understanding of the experienced, rather than expert conductor, and sits with grid 3,in its lack of articulated emotion.

5.9. Grid 9:

5.9.1. Overview of Interview:

This is the last of four interviews with conductors in the same CE centre, held on the same day. This Hungarian-trained conductor qualified 24 years 11 months previously. As manager she plays a significant role in the development of practice although rarely works with the children and adults. I gain informed consent. This time the conductor (as only the third conductor to do so) identifies a specific individual as role model, or Most Expert conductor. As I gain experience across the day, I feel most confident in this interview. I feel

the conductor's acceptance and positivity in being a part of the research, and this encourages me. It is hard to read her facial expression. She talks a great deal about the learner having fun, and yet her tone of voice and emotional expression during the interview does not always seem to match the words spoken (this reflects the concerns of her colleague, grid 7), and she appears disinterested. Reflecting in particular upon grid 3, I focus upon the words she articulates rather than the emotion. In this way I find it is possible to keep the flow of the conversation in which she talks about the passion she has for her role as a conductor.

5.9.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.9.1. whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.9.2.

Table 5.9.1.

Grid 9: Bipolar construct pairs. Those in **bold** are reversed in Figure5.9.

Emergent Pole Constructs	Implicit Pole Constructs
E1.Enabling	I1.Blocking communication
E2.Support learning and growth	I2.'Write someone off'
E3.Partnership	I3.Talking someone down
E4.Transparency	I4.Dishonest
E5.Confidence	I5.Reduce communication
E6.Stop growth and develop	**I6.Promote growth trust and safety**
E7.To do something with joy	I7.Burn out
E8.Confidence	I8.Lack of confidence
E9.Learning	I9.Give up/ out
E10.Stopping other peoples' learning	**I10.Sense of achievement**
E11.Fun	I11.Stop learning
E12.Enjoyment	I12.Miserable

Table 5.9.2.

Grid 9: Question No./ Element Titles

Construct	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	5	7	1	5	7	1	5	7	1	4	7	1
2	6	7	1	5	7	1	5	7	1	5	7	1
3	7	7	1	6	7	1	6	7	1	7	7	1
4	7	7	1	7	7	1	7	7	1	7	7	1
5	5	7	1	6	7	1	5	7	1	5	7	1
6	2	1	7	2	1	7	2	1	7	2	1	7
7	6	7	1	6	7	1	6	7	1	5	7	1
8	5	7	1	5	7	1	6	7	1	5	7	1
9	7	7	1	6	7	1	6	7	1	6	7	1
10	2	1	7	2	1	7	2	1	7	2	1	7
11	6	7	1	6	7	1	6	7	1	6	7	1
12	6	7	1	7	7	1	6	7	1	5	7	1

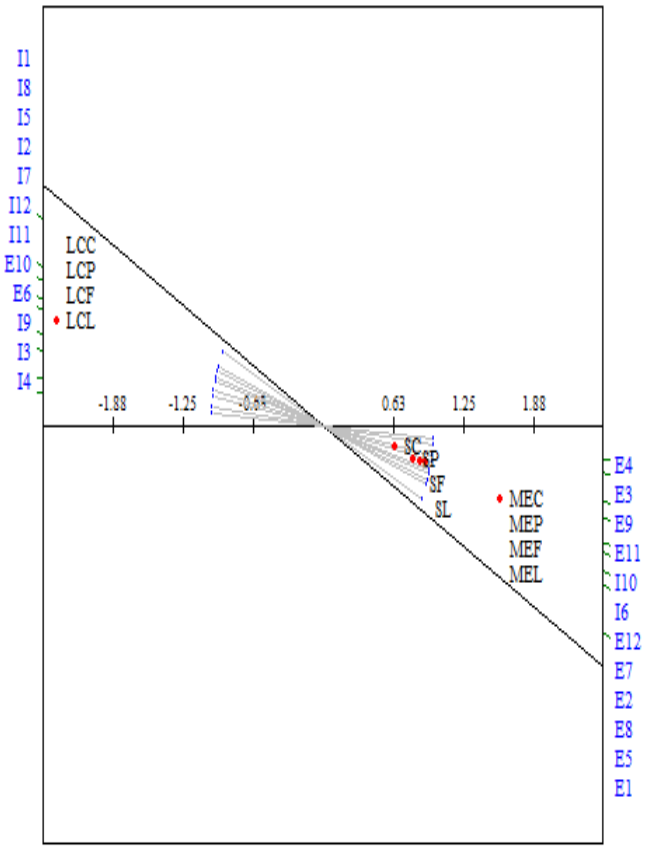


Figure 5.9 Grid 9. Idiogrid representation.

Using Idiogrid software, PCA analysis determines one component. This explains 92.07% of the variance and an eigenvalue = 11.05. The relationship between the elements and constructs is demonstrated in the 2D Idiogrid representation (Figure 5.9). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland,

2001). This supports the PCA findings of one component, which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. In spite of her level of experience, this conductor does not appear to consider herself an expert in any of the roles. She does however perceive herself strongest as leader (SL), and weakest as communicator (SC). This is reflected in Figure 5.9 with SL towards the outside of the group of elements, whilst SC is closest to the middle.

5.9.3. Qualitative Analysis:

5.9.3.1. Priority:

Whilst she may perceive herself as weakest as communicator, the priority for this conductor, identified at the end of the interview, focuses upon the relationship with the learner. In particular this relates to the expert's influence upon the learner's perception of success. She feels it is important that success is owned by the individual, not the conductor; "sense of achievement-that they (the conductor) creates in the other person, grin on face, pride, tears of joy". She feels it is essential that the expert empowers the individual. In contrast, in the context of the least competent

conductor, the individual is "passive, not doing anything, looking for others to help". The priority can be summarised as 'empowering the learner-keeping learner passive'.

5.9.3.2. Initial Coding:

This conductor compares herself to her role model and remembers the impact she has had upon her. The construct pairs (Table 5.9.1.) highlight her perception of the relationship as a partnership, which is both enabling and supportive (Qs1, 2& 3). The conductor is required to be transparent (Q4), to be confident (Q5, 8) and to create a learning environment in which having fun and enjoyment are key (Qs 6,7,9,10,11& 12).

5.9.3.3. Focused Coding:

As identified, communication is a central aspect of this conductor's perception of expertise. Her colleagues (grids 6, 7, & 8) also prioritise communication skills, and relationships within the professional team. For her, the leader is a role model; "you are an example to others, how you behave/communicate, supports others and develops confidence of others….communication is not just what is said - observe how the other person interacts" (Q5). In particular this relates to her ability to 'communicate with <u>everyone</u>' (<u>emphasised</u>) (Q5). She talks about the motivational impact of her role, not just upon the learner, but also upon her

team; "motivation - in a group, children/adult participants/staff…as manager, to achieve more. Have the enthusiasm to motivate staff…to do something with joy" (Q7). It is important to her that staff have a level of confidence and knowledge otherwise they "know it all….they will stop other people's learning" (Q10).

This conductor describes the relationship with the learner as 'enabling' (Q1), and 'supporting' (Q2). She perceives the expert to "support growth, learning, progression, self-confidence, achievement, praise", to "live as you talk…believe what you say, integrity, honesty". These thoughts are construed as 'transparency-dishonest' (Q4). The emotional aspect of the role is articulated as 'do something with joy-burnout' (Q7), and 'fun- demoralising, boring, destructive' (Q11).

Reflection upon the constructs in the context of this conductor's perception of herself as communicator, focuses thematic analyses around relationships, and their impact upon the learner's level of activity and motivational drive. The relationship is perceived as a partnership (Q3), in which the learner feels empowered (see priority). The constructs describe the expert's personality as positive and fun-loving.

This impacts the expert's ability to build and facilitate learning, empowering and instilling confidence. In contrast, the 'miserable' (Q12), under-confident (Q8) conductor, unable to see or facilitate learning (Q9), keeps the learner passive whilst also destroying themselves (Q7). The least competent has potential to 'stop growth and development' (Q6) and 'stop other people's learning and sense of achievement' (Q 10).

The theme is informed by the response to question 4; "live as you talk, believe what you say" more than any other detail. This perception unites the professional and the personal attributes of the expert, as the conductor's personality and attitude to life impacts upon their professional role. With this in mind, the theme for this grid is articulated as 'being true to your beliefs enables learning-playing a role restricts learning'. This can be further abstracted to 'personal application leads learning-mechanical response restricts learning'

5.9.4. Summary of Grid 9:

This conductor wants service users to have fun and to generate a partnership in which the learner is empowered to be active in their own learning process. She uses her experience of the role model and unashamedly reflects on

her own learning process over the years. In particular this relates to her ability to communicate, interact and respond to the others. Analysis of grid 9 expands understanding of self in the professional relationship. As one of four interviews from the same centre this grid supports understanding of expertise as greater than application of professional skill. It highlights the need to include the personal in the professional role, and to consider both group and team dynamics essential. It highlights the need for role models within the profession. This conductor as leader of the team appears to have successfully conveyed her priorities to them. In this way she personifies her statement of "live as you talk, believe what you say".

5.10. Grid 10:

5.10.1. Overview of Interview:

This male conductor is 47 years old and has been qualified for 25 years. He has a wide range of experience, and at the time of the interview is working as a conductor in a mainstream setting. Employed to teach the application of learnt skills, he perceives this to be a professional development opportunity. This interview expands the contexts in which conductors gain experience, with influence upon their perceptions of expertise.

The interview is initially a little stilted. It feels difficult to generate a relaxed atmosphere in which the conversation can flow. There is no particular reason for this, and as I now have some interviewing experience I do not feel particularly anxious. Unfortunately, however hard I try, I do not seem to be able to help him relax, or to be more spontaneous with his responses. I feel at times that I am being given the correct answers, as he ponders over each question and appears to overthink his answers. This disrupts the flow of the conversation and the generation of links between different questions. As a consequence, I reduce my questioning, fearful that more questions will only serve to increase the deliberation. His responses are largely single words and short

sentences, however they do add to the body of knowledge and understanding of expertise.

5.10.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor, during the interview are itemised in Table 5.10.1., whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.10.2.

Table 5.10.1.

Grid 10. Bipolar construct pairs. Those in **bold** are reversed in Figure 5.10.

Emergent Pole Constructs	Implicit Pole Constructs
E1.Too confident	**I1.Good knowledge**
E2.Good personality	I2.Mood swing
E3.Knowledge	I3.Bossing around
E4.Look at other person	I4.Follow the text, not look at the person
E5.Mutual respect	I5.Bossy/ dictator
E6.Not giving enough	**I6.Good pedagogue**
E7.How to use knowledge	I7.Don't know how to use knowledge
E8.Listening	I8.Telling others what to do
E9.Open to learning	I9.Don't want to develop
E10.Not think about others	**I10.Good team worker**
E11.Bring enjoyment to the group	I11.No enjoyment
E12.There to help	I12.Mechanical

Table 5.10.2.

Grid 10: Question No. / Elements Titles.

Construct	SL	MEL	LCL	SF	MEF	LCF	SP	MEP	LCP	SC	MEC	LCC
1	2	2	7	3	2	6	1	1	6	3	1	7
2	7	7	1	7	7	1	7	7	1	7	7	1
3	7	7	1	7	7	1	7	7	1	7	7	1
4	7	7	1	7	7	1	7	7	1	7	7	1
5	7	7	1	7	7	1	7	7	1	7	7	1
6	1	1	7	1	1	7	1	1	7	1	1	7
7	7	7	1	7	7	1	7	7	1	7	7	1
8	7	7	1	7	7	1	7	7	1	7	7	1
9	7	7	1	7	7	1	7	7	1	7	7	1
10	1	1	6	1	1	6	1	1	6	1	1	6
11	7	7	1	7	7	1	7	7	1	7	7	1
12	7	7	1	7	7	1	7	7	1	7	7	1

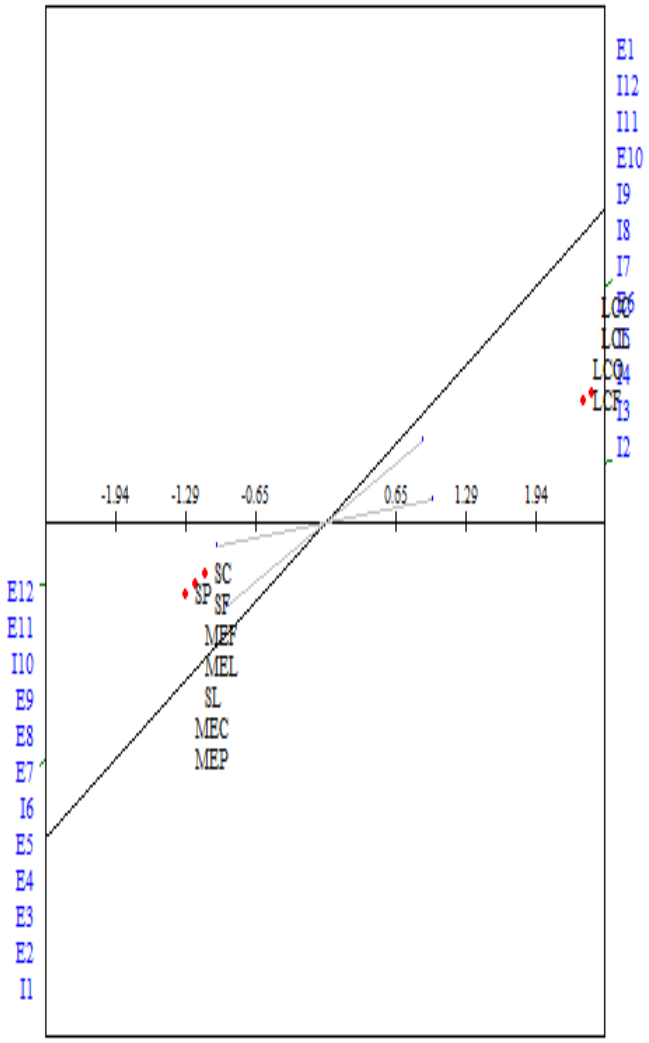


Figure 5.10 Grid10 Idiogrid representation.

Using Idiogrid software, PCA analysis determines one component. This explains 97.30% of the variance and an eigenvalue = 11.68. The relationship between the elements and constructs is demonstrated in the 2D Idiogrid

representation (Figure 5.10). This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component, which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. Similarity of scoring is reflected in Figure 5.10 with ME and Self elements close whilst the LC elements align with the implicit constructs on the outer edge of the figure.

5.10.3. Qualitative Analysis:

5.10.3.1. Priority:

At the end of the interview this conductor is asked to identify his priority from all the constructs articulated. He links personality and knowledge, with an ability to work in the team. In a similar way to the conductor in grid 9, this conductor perceives it to be essential that the conductor has a "fun side", and that they can "think about someone else". In contrast the worst characteristic is someone who is "bossy" and "miserable". The priority for this conductor relates to the ability to be both personal and professional; to

have the knowledge and the personality to be able to communicate and make a positive difference. It is less important to him that the conductor has knowledge, rather that they apply their personality to use the knowledge they have. This is summarised as 'personal and professional confidence-insecure, isolationist'. This reflects the perceptions of the conductors in interviews 9 and 6.

5.10.3.2. Initial Coding:

The constructs (Table 5.10.1.) describe the expert's personality (Q2,5,8,910,11& 12), their communication skills (Qs8 & 11), and their impact upon the environment (Q10). For this conductor it is the connection at a personal level that is important. By 'listening to' (Q8), 'giving to' (Q6) and 'thinking about' (Q10) the other person, the expert is able to connect with everyone, including the team (Q10). The conductor has 'good knowledge' (Q1) and communication skills (Q9), and they know how to use them (Q7) in their pedagogical role. They are stable (Q2) use their sense of humour (Q11) and work together with the individual (Q4), and the team, without being 'bossy' (Q3), dictatorial (Q5) or 'mechanical' (12).

5.10.3.3. Focused Coding:

During the interview this conductor describes qualities of good practice. The presence of a stable personality is perceived positively, with ability to "maintain good mood", as opposed to having "mood swings" (Q2). He defines "good personality" as "flexible, give advice…look through a situation…..how to respond without causing pain…encourages, not push backwards" (Q5). He links the use of "skills and knowledge to personality" with the conductor "able to use their knowledge in response to the individual and the environment" (Q7). It is important "to have confidence to talk to people, to take advice, to keep eyes open and to be open to learn more" (Q9). The expert is required to 'think about others' (Q10), 'look at the other person's personality' (Q4) and "listen to others" (Q2), as listening enables "teaching" (Q8).

With respect to the element roles, he links the pedagogue with both communicator (Q9) and facilitator (Q12), perceiving both to be essential if the expert is to be "part of a team" (Q1). He talks about the impact of the expert upon the team, and recognises that it is possible to "see it on their face…they enjoy the work, they talk to participants, they use the non-verbal from participants" (Q11). Without enjoyment

it is impossible to "encourage the learner" (Q11). He identifies a link between "pedagogue and leader" and articulates that if you are "too weak as a leader…….you can't give, so can't be a good conductor…not giving enough, opposite of the good pedagogue" (Q6). In contrast, behaviour is 'mechanical', which he describes as "following the text, not looking at the person" (Q12). Thematic analysis suggests that expertise is holistic in nature, and that the expert needs to be good in all roles. With a focus upon personality as the key to expertise, the theme for this grid is summarised as 'use of personality to lead learning– mechanical application of knowledge'.

5.10.5. Summary of Grid 10:

This rather laborious interview expands comprehension of conductor's perceptions of expertise. For this conductor, as with conductors 1 and 5, use of personality drives the professional role. This interview highlights specific characteristics, in particular the ability to communicate and respond to the individual and the professional team. Knowledge is important, but less important than the ability to connect with everyone.

5.11. Grid 11:

5.11.1. Overview of Interview:

This Hungarian-trained conductor has been qualified for 23 years. She works in a special school, and has an interest in the development of conductive practice in multi-professional settings. She talks passionately about her role in the school, her understanding of CE at a personal level, and about Maria Hári's, belief in the children. I gain informed consent, and request that she thinks of specific individuals. She reflects on her experiences as a newly qualified conductor working in the UK, and refers to one specific conductor as a role model, or expert.

She expresses concern with regards to her ability to communicate generally, however to ensure I understand her meaning, I question further, and frequently read back to her what she has said in order to confirm I have understood her correctly. At times, as she talks about her feelings, and the impact her role model has had upon her, she becomes emotional. This is the second interview in which emotion is expressed. I encourage her to articulate her thinking without becoming caught up in the emotion myself. I am able to disconnect slightly from the emotion, but not from the conductor. I enable her to articulate her thoughts, recognise

the uniqueness of her story, and position it within the context of others.

5.11.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.11.1., whilst the rating scores for each element, against each bipolar construct pair is shown in Table 5.11.2.

Table 5.11.1.

Grid 11: Bipolar constructs pair. Constructs in **bold** are reversed in Figure5.11.

Emergent Pole Constructs	Implicit Pole Constructs
E1.Unable to express herself	**I1.Flexible**
E2.Knowing the children	I2.Lack of understanding-pedagogy, humanity
E3.Seeing the potential in others	I3.Not able to see the potential in others
E4.Keep on learning	I4.'Know it all'
E5.Listening	I5.Not really interested
E6.Lack of understanding	**I6.Confidence & openness to learn**
E7.Knowledge of CE and pedagogy	I7.Lack of knowledge
E8.To get the best out of people	I8.Negative, bossy, directive
E9.Person knows you believe they 'can'	I9.Unable to communicate belief in person
E10.Not understanding the people	**I10.Good understand of the people**
E11.Ability to respond to needs of the group	I11.Inability to respond
E12.Use of nonverbal to communicate	I12.'Noisy'

Table 5.11.2.

Grid 11: Question No.s / Elements Titles.

Construct	SL	MEL	LCL	SF	MEF	LCF	SP	MEP	LCP	SC	MEC	LCC
1	2	1	6	1	1	6	3	1	5	2	1	5
2	6	7	3	7	7	3	5	7	2	6	7	2
3	7	7	2	7	7	3	6	7	3	7	7	2
4	7	7	3	7	7	3	6	7	3	7	7	3
5	7	7	4	7	7	3	7	7	3	7	7	3
6	2	1	6	1	1	6	2	1	5	1	1	6
7	6	7	2	6	7	2	6	7	2	6	7	2
8	6	7	3	7	7	2	6	7	2	6	7	2
9	7	7	2	7	7	2	6	7	2	7	7	2
10	1	1	6	1	1	6	2	1	6	1	1	6
11	6	7	2	7	7	2	6	7	2	7	7	2
12	7	7	3	7	7	2	6	7	2	7	7	2

Using Idiogrid software, PCA analysis determines one component. This explains 92.40% of the variance with an eigenvalue = 11.09. The relationship between the elements and constructs is demonstrated in the 2D Idiogrid representation (Figure 5.11). This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component, which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. This conductor considers herself more expert than least competent, most competent as facilitator (SF), and least competent as pedagogue (SP). This is reflected in the grid scores in Table 5.11.2. and Figure 5.11 (Idiogrid) in

which it is possible to identify SF closest to the constructs and ME elements, with SP closer to the central point, further away from the ME elements.

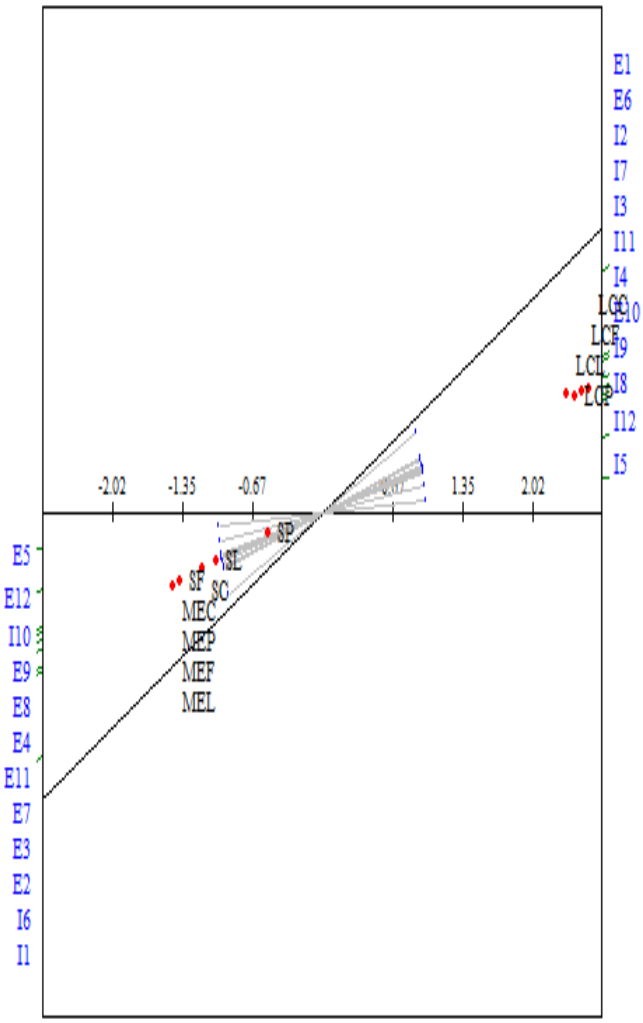


Figure 5.11. Idiogrid representation of Grid 11.

5.11.3. Qualitative Analysis:

5.11.3.1. Priority:

At the end of the interview this conductor prioritises the need for continuing professional development, in particular the need for the expert to become flexible and knowledgeable. "Conductors' self-development improves you, knowledge and understanding…. makes you more open to new knowledge, ideas and research…..not just sitting in a CE box….Hári believed in the children, and to make the children believe in themselves…need to get that knowledge to others in the team". The priority for this conductor is identified as "professional development-no desire to develop CE either personally or at a professional level". This is further abstracted to 'lifelong learner-stagnant'.

5.11.3.2. Initial Coding:

Consideration of the theory-practice link is evident. The constructs (Table 5.11.1.) reflect the need to 'see the potential in others' (Q3), 'to get the best out of people' (Q8) and to show the 'person you believe they can' (Q9). There is an expressed need to understand CE philosophy, and apply that knowledge to the practical situation. This is expressed as 'knowing the children-lack of understanding of pedagogy, of humanity' (Q2). The good pedagogue can lead, communicate

(Q2) and facilitate (Q4) towards aims (Q6). They know their own strengths and weaknesses, those of the children, and the team (Q4). They have a desire to continue learning (Q4) from others (Q7) both professionally and personally. They use their knowledge for the good of the whole (Q8) as well as the individual (Q10). In contrast, the least competent lacks understanding (Q10) of potential (Q3) pedagogy, facilitation (Q6) and humanity (Q2). They "know it all" (Q4), but lack knowledge (Q7) unaware of gaps in knowledge and skills (Q4). They are 'bossy' and have a negative impact (Q8).

5.11.3.3. Focused Coding:

This conductor talks about communication as "not just language" (Q1). For her, it is essential that communication is not just verbal (Q1), but emotional (Q5). She talks about the "personal skills of the facilitator, without words can motivate" (Q12). The expert needs to listen (Q8) and "communicate belief" (Qs9& 11). In contrast, the least competent is, "always talking, being noisy" (Q12).

She talks about the relationship with the learner, and the team; "learning from other conductors" (Q8), and that to be the leader you need "listening skills", and an ability to "work with the team" not "dictator" (Q5, Q8). The expert needs to

be ‘flexible’ (Q1), to “listen”, to “be supportive” (Q5). Listening is important, so that “you can change your response…. to be effective” (Q11), and to help them “see their own potential sooner” (Q3). The expert needs to “know where you are going” (Q6).

Saying that pedagogy is “not just teaching” (Q4), in a similar way to the conductor in grid 10, she links the roles of facilitator and pedagogue, believing that “to be a good facilitator, you need to have a good understanding of the pedagogy” …….“how to use different facilitation…in the learning process how important pedagogy is in facilitation” (Q4). It is important for her that she continues to learn “facilitation in CE and ability to consider new things from others, and how to use” (Q7). She emotionally articulates the impact of CE upon her own personal and professional development, “CE taught me I was closed, unable to express myself”(Q1), links solidly to her priority of lifelong learning.

Summarised as ‘flexibility in communication skills facilitates self-belief and learning-rigid application of theory destroys development’, the theme for this grid relates to the need for continued professional development. This can be further

abstracted to ‘reflective practice increases learning-mechanical practice destroys learning’.

5.11.4. Summary of Grid 11:

This interview expands insight into the experiences of a group of conductors, with more than 20 years experience (grids 1,2,3,9, 10& 11). Having trained in Hungary under the direct influence of Petö and Hári, these conductors offer a unique perspective on CE, in particular the significance of flexible and responsive communication skills. The constructs in this grid reflect this conductor’s professional journey, and expand comprehension of the relationship, and the perceived skills of the expert further. This interview links personal application of the pedagogy to ensure continued professional development; excellent communication skills, an ability to facilitate openness and a flexibility to be transformative. In this way the expert can be perceived to be a reflective practitioner.

5.12. Grid 12:

5.12.1. Overview of Interview:

This Hungarian-trained conductor qualified from the Petö Institute 21 years previously. She has a range of experience with both children and adults. At the time of interview she

works in a parent and child service. On the day of the interview, she has a heavy cold and whilst she is willing to participate, she finds it difficult at times to participate as much as she wants. As a result I feel a little awkward, however as the conductor is at work, and is willing to participate, I support her participation.

5.12.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.12.1., whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.12.2.

Table 5.12.1.
Grid 12: Bipolar construct pairs. Constructs in **bold** are reversed in Figure5.12.

Emergent Pole Constructs	Implicit Pole Constructs
E1.Less experience	**I1.Lots of experience**
E2.Knowledge and professional and personal skills	I2.Lack of Knowledge and skills
E3.Understanding the other person	I3.Not aware of the needs of the other person
E4.Continuous observation	I4.Unable to be flexible
E5.Confidence	I5.Not confidence
E6.Dont know the children and their needs	**I6.Knowing the children and needs**
E7.High expectation	I7.Care but not expect
E8.Fair and firm	I8.Avoid frustration
E9.'That makes sense'	I9.Not understanding the whole
E10.Poor social intelligence	**I10.Able to self reflect**
E11.Changing people's lives	I11.Lacking knowledge
E12.Professional knowledge	I12.Less expert

Table 5.12.2.

Grid 12: Question. No. / Element Titles.

Const	SL	MEL	LCL	SF	MEF	LCF	SP	MEP	LCP	SC	MEC	LCC
1	1	1	5	1	1	7	1	1	7	3	1	5
2	6	7	1	7	7	2	6	7	1	5	7	1
3	6	7	1	7	7	1	6	7	1	5	7	1
4	7	7	1	7	7	1	6	7	1	7	7	1
5	7	7	1	7	7	1	6	7	1	6	7	1
6	1	1	7	1	1	7	2	1	7	2	1	7
7	7	7	1	7	7	1	7	7	1	7	7	1
8	7	7	1	7	7	1	7	7	1	7	7	1
9	7	7	1	7	7	1	6	7	1	6	7	1
10	2	1	7	1	1	7	2	1	7	2	1	7
11	6	7	1	7	7	1	6	7	1	6	7	1
12	6	7	1	7	7	1	6	7	1	5	7	1

Using Idiogrid software, PCA analysis determines one component. This explains 95% variance with an eignevalue= 11.40. The relationship between the elements and constructs is demonstrated in the 2D Idiogrid representation (Figure 5.12). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 200). This supports the PCA findings of one component, which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. This conductor perceives herself most expert in her role as

facilitator (SF) as can be seen in Table 5.12.2. and Figure 5.12 in which SF closest to the ME elements and emergent pole constructs.

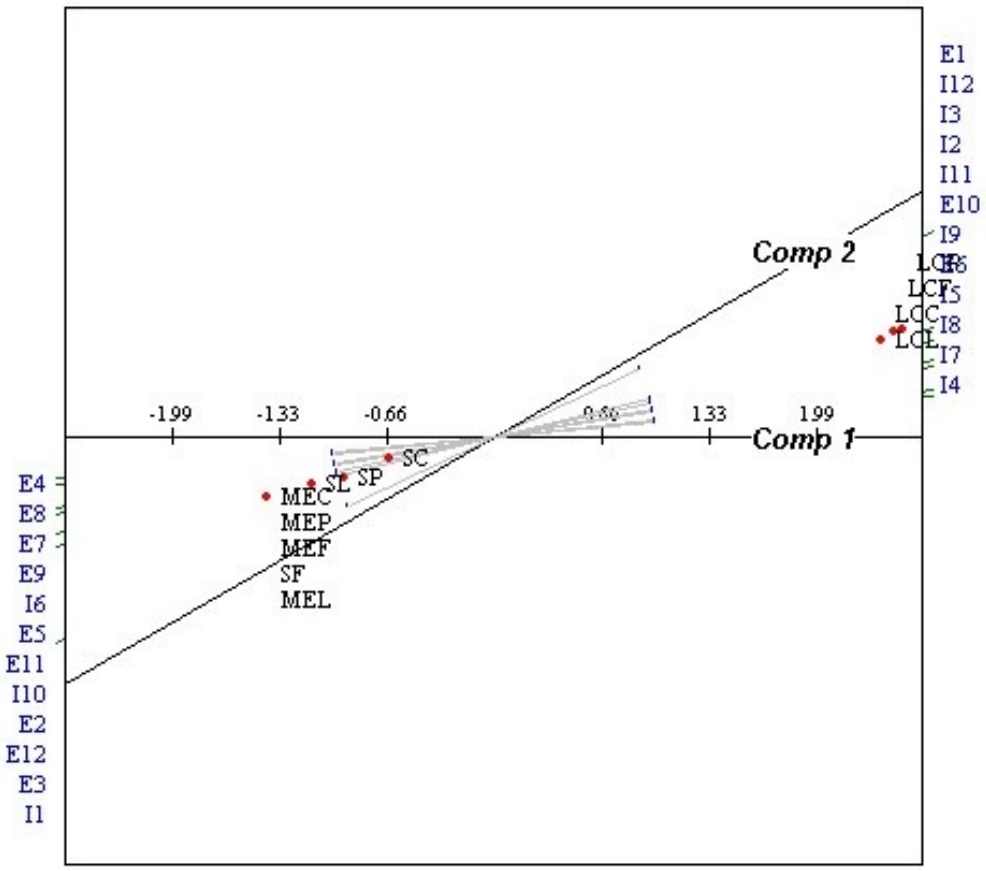


Figure 5.12 Idiogrid representation of Grid 12.

5.12.3. Qualitative Analysis:

5.12.3.1. Priority:

As with earlier interviews, at the end I ask this conductor to prioritise her constructs. This she expresses as a need to "change people's lives for the better". She believes she can do this by "putting her heart into it". This is dependent upon the "relationship with parents, feedback, attendance and seeing for yourself the improvement". In contrast the least competent conductor "didn't put their heart in their work, they just do the work, but not their best". In summary the bipolar priority for this grid is stated as 'working with parents to change their lives for the better–mechanical practice'. This can be further abstracted to 'transformative-mechanical'.

5.12.3.2. Initial Coding:

The constructs (Table 5.12.1.) signify an awareness of the professional and personal aspects of the expert conductor, the need to have knowledge and skills, as well as the social and emotional strengths to be able to use them effectively. The expert conductor is perceived as both personal and professional. They need confidence (Q5), experience (Q1) and knowledge (Qs2& 12). Knowledge relates to the professional demands of the role; the need to set expectation (Q7), to be 'firm and fair' (Q8), and to use observation

flexibly (Q4). The expert has to be able to "adapt to the setting, to see what is going on" (Q10). They need to be able to understand the learner (Q3) and convey expectation (Q7). In contrast the least competent cares, but does not expect (Q7).

In order to achieve success, the expert needs to be able to communicate (Q3) and respond to the needs of the individual (Qs3,4 & 6). She talks passionately about the need to be flexible (Q4), to "see the situation from many different angles" (Q7) and to show compassion; "I care about you and you have to achieve". She works with the "child through the parents" (Q7) and in this way is able to understand the whole, and "see the situation from many different angles" (Q9).

5.12.3.3. Focused Coding:

The constructs expand understanding of the conductor role and the demands placed upon the relationship with the learner/ parents. In terms of specific roles, she recognises that the "leader needs good communication skills"(Q3) and "good facilitation skills with people and conductors" (Q4).

The "leader has to facilitate…..not just dealing with conductors - have to work with staff" (Q6). Articulation of the

role of facilitator reflects her desire to bring about positive change, whilst the pedagogue is someone who "has to communicate" (Q9). In contrast the least competent is unable to communicate (Q1). Whilst knowledge and experience (Q2) are important, social skills and intelligence (Q10) are equally essential, as is the ability to communicate in a way that 'makes sense' (Q9). She qualifies good social skills as enabling someone "to evaluate their own performance compared to others, to be better than others" (Q10). She links experience and specifically "success" with expertise (Q11), and adds a new dimension to the analysis.

She links confidence with "language issues, can't find the right word….People want to understand, so they will listen more, the accent is secondary" (Q5). Implicit within this is her ability to problem-solve, her use of non-verbal skills and her ability to use the "feedback" (Q5) she receives from parents. This qualifies aspects of expertise and the need to see communication as a two-way process as the expert observes for feedback to reinforce "how useful the knowledge is" (Q5). The expert's ability to set expectation (Q7) is essential, and whilst there is no explicit expression of belief in the individual, this is implied in her response to Q7; 'high expectation-care but not expect'. It is not the presence of

caring that changes the dynamic of this construct, rather the lack of expectation. With this in mind, the relationship the conductor has with both parents and children is "firm, but fair" (Q8). This is significant. Whilst she wants people to be happy this is not at any cost. She feels it inappropriate to "avoid frustration" by "going with the flow, keeping people happy all the time" (Q8). She feels in order for parents and children to learn it is important to "have some frustration". This links with her articulated need to set expectations, and ability to "look in the longer term…as well as the short term" (Q8). These perceptions conflict to some extent with those expressed by the conductors in grids 6, 7, 9 and 10 in which conflict is to be avoided, and fun prioritised.

The relationship with the parents, recognition of their reality and the difficulties they face sets the context for the theme. For her it is important that the conductor uses their observation and knowledge (Q11) to facilitate change and progress (Q12). This is possible only by their ability to "take small steps" (Q11) in the context of "the bigger picture" (Q8). Utilising all the interview data, it is possible to construct one theme; 'having the belief that change is possible-doing the work but without the expectation'. This

can be further abstracted to ‘application of the belief-no expectation’.

5.12.4. Summary of Grid 12:

For this conductor belief is at the heart of everything she does. Expertise relates to an ability to communicate, and to combine professional skills and knowledge with personal strengths. However, whilst skills and knowledge are important, it is the conductor’s ability to connect with the parents and the children, and create opportunity to face challenge that is significant. Whilst caring is important, it is essential to set expectations, achieved by the way in which the expert uses and adapts their social skills. This interview supports the need for conductors to gain experience and as shown in earlier grids (1, 2, 9, 11) to live out belief by their actions.

5.13. Grid 13:

5.13.1. Overview of Interview:

This male conductor qualified from the University of Wolverhampton 5 years previously. He is 37-years-old and is working with adults and children in a multi-professional special school setting. He has a range of experience working as a conductor both within the UK and internationally. Having

recently returned to the UK, he appears a little unsure of himself, however he is happy to be included in the research and participates fully in the interview. I gain informed consent, and request that he think of specific individuals rather than element roles. He is one of only four conductors (grids 1, 9, & 11) who are able to refer to a role model, someone he considers to be most expert. This interview adds to the body of knowledge of perceptions of expertise, and in particular reinforces the need for role models within the profession.

5.13.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.13.1., whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.13.2.

Table 5.13.1.

Grid 13: Bipolar construct pairs. Constructs in bold are reversed in Figure 5.13.

Emergent Pole	Implicit Pole
E1.Poor listeners	**I1.Present in moment**
E2.Good communication	I2.Poor communication
E3.Good non-verbal communication	I3.Reliance on verbal
E4.'Knowing' the person	I4.Not knowing the individual
E5.Imparting knowledge and skills	I5.Inflexibility
E6.Not able to see the bigger picture	**I6.Observation of the group**
E7.Observation	I7.Lack of observation
E8.Use observation to change your input	I8.Lack of observation-don't change
E9.Confidence	I9.Unconfident
E10.Arrogant	**I10.Empathetic**
E11.Good non-verbal	I11.Tunnel vision
E12.Poor team working	**I12.Good team working**

Table 5.13.2.

Grid 13: Question No.s/ Element title.

Q	SL	MEL	LCL	SF	MEF	LCF	SP	MEP	LCP	SC	MEC	LCC
1	3	1	7	3	1	7	3	1	7	2	1	7
2	5	7	1	6	7	1	5	7	1	6	7	1
3	5	7	1	5	7	1	5	7	1	5	7	1
4	5	7	1	5	7	1	5	7	1	6	7	1
5	6	7	1	6	7	1	5	7	1	6	7	1
6	3	1	7	3	1	7	3	1	7	3	1	7
7	5	7	1	5	7	1	5	7	1	5	7	1
8	6	7	1	6	7	1	6	7	1	6	7	1
9	5	7	1	6	7	1	5	7	1	6	7	1
10	2	1	7	2	1	7	2	1	7	2	1	7
11	5	7	1	6	7	1	5	7	1	6	7	1
12	2	1	7	2	1	7	2	1	7	2	1	7

Using Idiogrid software, PCA analysis is determines one component. This explains 93.38% variance, with an eigenvalue = 11.21. The relationship between the elements and constructs is demonstrated in the 2D Idiogrid

representation (Figure 5.13). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component, (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. This conductor perceives himself strongest in his roles as facilitator (SF) and communicator (SC) and weakest as pedagogue (SP). This is reflected in Figure 5.13 in which the SF and SC elements are closer to the emergent constructs and ME elements, whilst SP is closest to the centre, and further from the ME elements.

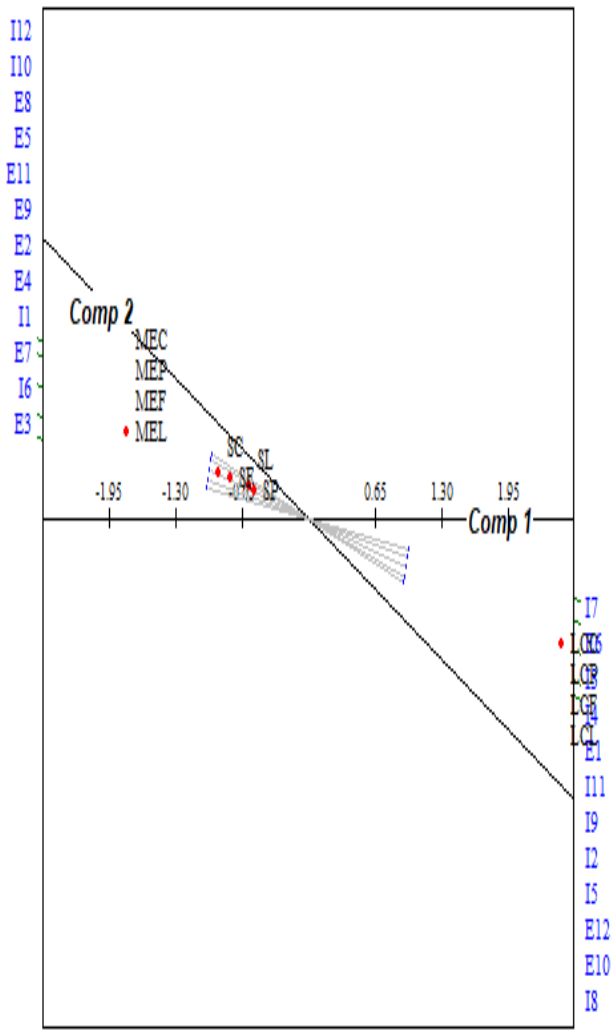


Figure 5.13 Idiogrid representation of Grid 13.

5.13.3. Qualitative Analysis:

5.13.3.1. Priority:

At the conclusion of the interview, reflecting the views of others (grids 6, 9, 10 & 11) this conductor focuses upon the expert's ability to work within the team. He refers back to his role model and recognises her use of "non-verbal communication skills to create a positive atmosphere". In contrast the "arrogant conductor", may have "experience and knowledge" but is unable to "transfer this information". The priority for this grid is stated as 'intuitive creation of positive atmosphere–arrogance blocks connectivity'. This can be further abstracted to 'intuition-arrogance'

5.13.3.2. Initial Coding:

This conductor presents a convincing perception of the expert as a person. His constructs reflect the human aspect, rather than abstract skills to be learnt or developed. The constructs (Table 5.13.1.) in this grid create a perception of the expert as confident (Q9), knowledgeable (Qs4& 5), and 'in the moment' (Q1). The expert can communicate both verbally and non-verbally (Qs2,3,10& 11). Likewise their use of observation (Qs 6, 7& 8) facilitates flexible (Q8) working in the group (Q6) and ability to see the bigger picture (Q11).

5.13.3.3. Focused Coding:

There is a strong identity with the group and the need to feel a part of it. This conductor reflects upon his role model. This influences his articulations with particular respect to the pedagogical role. In large measure this relates to the ability to communicate non-verbally, and to work with the team (Q12). His role model communicates so effectively and smoothly that she makes it "look like magic" (Q3). He talks about the need to understand what communication is and how to use different approaches more effectively. Communication is required to set the scene, to "say the right things at the right time, and to know when to 'shut up'"(Q5). This impacts the expert's ability to "be in the moment" (Q1), and see the bigger picture in all situations (Q6). He links "communication with better pedagogy" (Q9) and "non-verbal communication with ability to look around" (Q11). This leads to the bipolar construct 'good non-verbal-tunnel vision', and reflects the need to participate fully in the team situation (Q12). He perceives verbal communication to be best used outside the group, whilst non-verbal is more effective inside the group environment (Q3).

There is little in the interview to suggest the specific knowledge to be shared, rather the skills required to observe,

communicate and facilitate leading. When talking about the role of leader, he identifies the need to set expectations, and lead the individual towards the goal (Q4). He links ability to communicate with "flexibility" (Q9), and "observation of the group" with better "leading and facilitating" (Q7). For him, the pedagogue must be prepared to "take a risk" and to have the confidence to "get yourself out of it" (Q9). His awareness of the need to push your own boundaries, not just the learners', is a unique aspect of this interview. The confidence to achieve this is closely linked to, but significantly distant from, arrogance (Q10), perceived to be harmful, described as "self-belief at all costs". With consideration to the above analysis, the theme for this grid is stated as 'confidence to extend interpersonal skills- reduced risk taking and ability to communicate effectively'. This can be further abstracted to 'intuitive communication–unconfident interaction'.

5.13.4. Summary of Grid 13:

Prior to this interview only Hungarian-trained conductors with at least 20 years' experience referred to a specific expert, or role model. I perceive it to be positive that role models are considered relevant to 21st century practice. This interview highlights the need for expert communication skills. Whilst the constructs are similar to those in other grids, the

discussion between each question expands comprehension of confidence as a necessary part of expertise. The need to take risks, and the intuitive aspects of practice expressed by this conductor as magic, are central features of this conductor's perception of expertise.

5.14. Grid 14:

5.14.1. Overview of Interview:

This UK-trained conductor is 31 years old. She qualified from the University of Wolverhampton 9 years previously. Since qualifying she has been employed in a CE centre working with children. Over this time her role has developed and she is now the senior conductor at the centre. She remembers her training well. In particular she recalls her first day as a student when the focus was upon the interpersonal relationship with the learner.

5.14.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.14.1., whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.14.2.

Table 5.14.1.

Grid 14: Bipolar construct pairs. Those in **bold** are reversed in Figure 5.14

Emergent Pole Constructs	Implicit Pole Constructs
E1.Poor communicator	**I1.Excellent communicator**
E2.Good use of facilitation	I2.Not engaging in relationship
E3.Understanding	I3.Inability to understand
E4.Ability to reflect on self and relationship	I4.Lack of self-reflection
E5.Think outside the box	I5.Narrow minded
E6.Know how to get the best out of someone	I6.Not knowing the individual
E7.Knowing how to use the 'tools'	I7.Not able apply skills
E8.Self-reflection on the process of what's going on	I8.Going through the motions
E9.Reflect on effectiveness of communication	I9.Speaking not listening
E10.Not able to create a trusting relationship	**I10.Gain persons trust**
E11.Knowing where expectations lie	I11.Expecting too little
E12.Acting upon self-reflection	I12.Not reflecting on your role

Table 5.14.2.

Grid 14: Question No.s / Element Titles

Ele	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	3	2	6	2	1	7	3	1	7	2	1	7
2	6	7	1	6	7	1	5	7	1	6	7	1
3	6	7	1	6	7	1	5	7	1	6	7	1
4	5	7	1	6	7	1	5	7	1	6	7	1
5	5	7	1	6	7	1	5	7	1	6	7	1
6	6	7	1	6	7	1	5	7	1	6	7	1
7	6	7	1	6	7	1	5	7	1	6	7	1
8	5	7	1	6	7	1	5	7	1	6	7	1
9	6	7	1	6	7	1	6	7	1	6	7	1
10	2	1	7	2	1	7	2	1	7	2	1	7
11	6	7	1	6	7	1	5	7	1	6	7	1
12	5	7	1	6	7	1	5	7	1	6	7	1

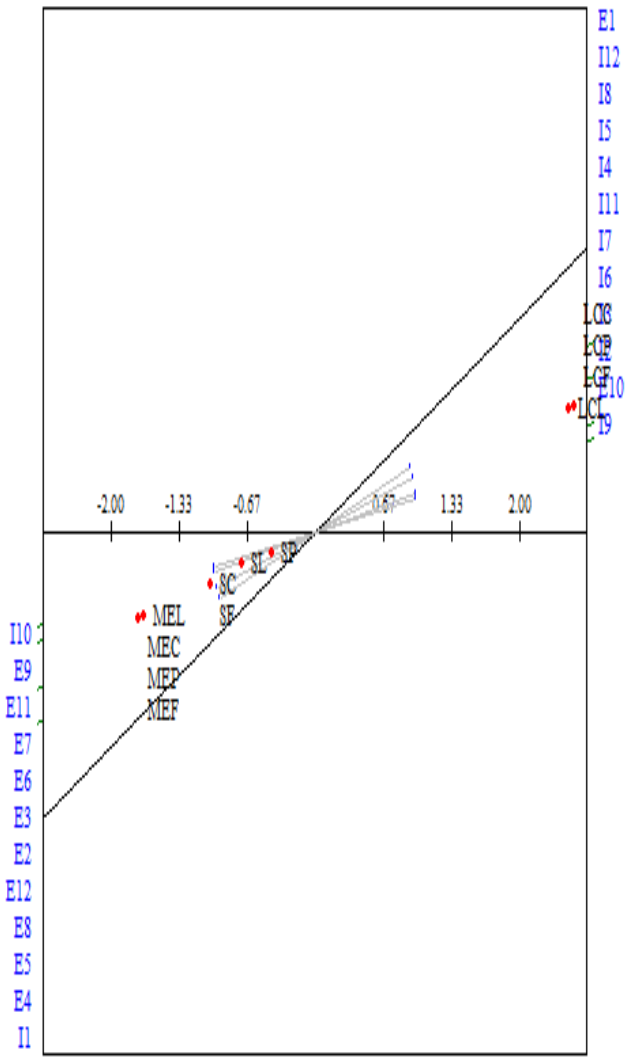


Figure 5.14 Gird 14 Idiogrid representation.

Using Idiogrid software, PCA analysis determines one component. This explains 99.42% of the variance with an eigenvalue = 11.93. The relationship between the elements and constructs is demonstrated in the 2D Idiogrid

representation (Figure 5.14). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component, which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. Evidenced in Figure 5.14, and Table 5.14.2. this conductor perceives herself strongest in the roles of facilitator (SF) and communicator (SC), with pedagogue (SP) as her weakest role. In Figure 5.12 SF and SC are positioned closer to the ME elements, with SP closer to the centre.

5.14.3. Qualitative Analysis:

5.14.3.1. Priority:

This conductor perceives the relationship with the learner as the most significant aspect of expertise. She describes this as "building the trust, knowing the individual….evaluate skills, see learning then you know you have the relationship and the knowledge". A priority is identified, and summarised as 'building, and reflecting upon the impact of the pedagogical

relationship'. This is further abstracted to 'reflexive pedagogue'

5.14.3.2. Initial Coding:

The relationship with the learner is perceived to be the most significant aspect of expert practice for this conductor. Utilising the bipolarity of the constructs (Table 5.14.1.), the expert's ability to 'think outside the box-narrow minded' (Q5), 'knowing how to use the tools' (Q7), 'know how to get the best out of someone' (Q6), and 'knowing where the expectations lie' (Q11) are associated with pedagogical expertise. The expert's ability to reflect upon the impact of their skills to facilitate learning is articulated as 'reflect upon the effectiveness of communication' (Q9) and 'self-reflection on the process of what's going on' as opposed to 'going through the motions' (Q8). The latter can be seen to describe the 'mechanical' delivery of CE. The skills required by the expert include trust (Qs3&10), communication (Qs1,3,4,5,7,9&11) and facilitation (Qs2,6& 11). Central to this is the expert's desire to facilitate learning, qualified by their ability to observe and reflect upon the impact of their own actions (Qs2,4,8,9&12).

In contrast, the least competent is unable to observe or to reflect upon their behaviour. As a consequence, they are perceived to be unable to change their practice.

5.14.3.3. Focused Coding:

The expert is able to think creatively and access a range of tools. They can facilitate learning, reflect upon their role and the pedagogical relationship. In contrast the least competent is fixed in their problem solving and so behaves rigidly (Qs2,4,5,6,7,8, 11&12). The expert communicator is able to build a relationship and use it to develop learning, whilst the least competent speaks instead of listens, and expects little of the learner (Qs1,3,9&10). These articulations relate to previous interviews (for example 10 and 12) and expand understanding of the holistic nature of the conductor role; "have to be good facilitator…makes a good leader" (Q2,6), "communication is key part of being a leader" (Q3), "pedagogue-communication is an element" (Qs5&9), "striving to be a good leader-reflect on ability to be a pedagogue" (Q8), "competent at facilitation makes better pedagogue" (Qs10&12), "communication is part of facilitation" (Q11), and "self reflection…is an element of the pedagogy" (Q12).

The constructs reflect this conductor's understanding of communication as the primary skill, together with an ability to reflect upon their effectiveness as a pedagogue. The theme for this grid is summarised as 'adapt communication and pedagogy to lead learning-unable to reflect upon pedagogical impact'. This can be further abstracted to 'reflexive pedagogical relationship-inability to respond'.

5.14.4. Summary of Grid 14:

This conductor perceives herself weakest in the role of pedagogue, however her perception of the expert focuses upon the pedagogical role, and the relationship created with the learner. Her construing reflects her perceptions that the expert thinks broadly and flexibly in order to respond dynamically to the learner.

5.15. Grid 15:

5.15.1. Overview of Interview:

This conductor is 46 years old. She is Hungarian, with British citizenship. She qualified from the Petö Institute 24 years previously, and works in a CE school setting as a senior conductor. The interview is upbeat and positive throughout. This conductor completely defines herself as expert, and scores herself as such. She articulates that she does not like the least competent elements as they are "too negative", however consistently scores these elements as such. This conductor is unable to personify the elements, and scores all elements equally, as 7 or 1(Table 5.15.2). I leave without any concrete sense of what is important to her, however continue with analysis in the belief that her words hold relevance. This conductor works with the conductor in grid 3. There is a period of time in between these two interviews, which enables me to approach this interview with greater objectivity. The main similarity identified is reflected in the sense of 'realism', that I perceive to constrain belief in both the pedagogy and the individual.

5.15.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.15.1., whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.15.2.

Table 5.15.1.

Grid 15: Bipolar construct pairs. Those in **bold** would be reversed if an Idiogrid representation were possible.

Emergent pole constructs	Implicit pole constructs
E1. Not able to understand the needs of the individual	**I1.On the same wavelength**
E2. Knowing the goals	I2.Chaos
E3. Setting expectations	I3.Not understanding their needs
E4. Understanding of the theory	I4.Not delivering the main principles
E5. Well rounded person	I5.Put their needs first
E6. Lack of goals	**I6.Tuned in**
E7. Resourceful & skilful	I7.Lack of skills & understanding
E8. Understanding about what you want to achieve	I8.Delivering without having goals
E9. Believe in what saying	I9.Not being realistic
E10. Choose not to understand	**I10.The desire and ability to deliver**
E11. Enable activity	I11.Not able to help people achieve
E12. Give chance to achieve	I12.Not understanding the person

Table 5.15.2.

Grid 15:Question No.s / Element titles.

Elem/co	SL	MEL	LCL	SF	MEF	LCF	SP	MEP	LCP	SC	MEC	LCC
1	1	1	7	1	1	7	1	1	7	1	1	7
2	7	7	1	7	7	1	7	7	1	7	7	1
3	7	7	1	7	7	1	7	7	1	7	7	1
4	7	7	1	7	7	1	7	7	1	7	7	1
5	7	7	1	7	7	1	7	7	1	7	7	1
6	1	1	7	1	1	7	1	1	7	1	1	7
7	7	7	1	7	7	1	7	7	1	7	7	1
8	7	7	1	7	7	1	7	7	1	7	7	1
9	7	7	1	7	7	1	7	7	1	7	7	1
10	1	1	7	1	1	7	1	1	7	1	1	7
11	7	7	1	7	7	1	7	7	1	7	7	1
12	7	7	1	7	7	1	7	7	1	7	7	1

In contrast to the previous grids, there is no variation amongst the ratings, that is, scoring is consistently 1 or 7. PCA analysis determines an 'invalid floating point'. The eigenvalue is 12 with 100% variance. Analysis continues with a view to determining a single bipolar theme.

5.15.3. Qualitative Analysis:

5.15.3.1. Priority:

The priority stated at the conclusion of the interview is given as "personality…have to be a certain type of person, constantly have to be able to motivate, have to be happy and able to communicate". This is summarised as 'personality'.

5.15.3.2. Initial Coding:

This conductor works closely with the conductor in grid 3. With no component identified, cognitive complexity is

described as fragmented (Bell, 2004). With all the variance associated with the first factor (Bell, 2006) it is possible to perceive the constructs as correlated, and connected to the component (Field, 2005). Qualitative analysis focuses upon the generation of one theme, in spite of this fragmentation. The focus for this conductor is upon the relationship with the learner, and her ability to use positivity to create active learning.

The constructs (Table 5.15.1.) present an image of a conductor with a 'well-rounded personality' (Q5), who puts the learner first. They are 'resourceful' (Q7), 'open, honest and realistic' (Q9). They have the knowledge and skills to deliver an effective conductive programme. This includes the ability to 'know the goals' (Qs2,6& 8), 'set expectations' (Q3), 'understand the theory' (Q4), and 'enable activity' (Q11) and 'achievement' (Q12). In contrast the least competent is unable to 'understand the needs' of the individual (Qs1,3 &12), does not know the 'goals' (Qs2& 8), 'puts their own needs first' (Q5), is 'unrealistic' (Q9) and unable to 'achieve success' (Q11).

5.15.3.3. Focused Coding:

The expert is perceived to be "open, honest, realistic" (Q8), "well organised, attentive, focused, hard-working, having the desire and ability to deliver" (Q10). As with grid 8, the expert is expected to want to learn and to support development (Qs10& 11). Strong links between the element roles are identified. She articulates if they are "not able to deliver facilitation, then won't be able to communicate" (Q1), and that "without communication how can they be active?" (Q1). To be a good pedagogue, it is necessary to be "a good leader……poor pedagogue means very poor conductor" (Q2). A pedagogue is someone who "enabled people" whilst poor pedagogy means that you are not able to "deliver the main principles" (Q4). In keeping with this concept, "better communicator makes them a better pedagogue" (Q5), whilst "to be a teacher there needs to be a level of leadership" (Q8). She links the elements of leader and facilitator by articulating that you can "lead only towards that which you can facilitate" (Q11). This challenges the thoughts of the conductor in gird 13 who feels that it is important to have the confidence to take a risk.

Where the expert is "open, honest and realistic"(Q9) in contrast the least competent can "not fully explain the

implications of CE…possibly not being honest…….not help them accept". Whilst the expert might understand that "CE is a lifestyle not a cure" (Q8) and be "empathetic" in their teaching (Q1), the least competent is unable to be spontaneous or responsive, instead is only able to focus upon the plan (Q2).

Whilst the construct pairs within the grid present superficially as expert, on closer reflection there appears to be a restriction in this conductor's perception. Whilst she says the right things, in a similar way to the conductor in grid 8, she presents an image of the expert, in which the learner is 'enabled to achieve and to be active' (Q11). These statements suggest a degree of uncertainty, and lack of confidence about how, and what, to communicate to the learner. With more than 20 years' experience this conductor could be considered to be expert, however her construing suggests that experience and expertise are not synonymous. She is less able to convey the pedagogical, and philosophical aspects of CE, such as belief and potential, as others (for example grids 1 &2) have. The theme for this grid is stated as 'competent, experienced, skilful and selfless-incompetent without the desire to understand or prioritise the learner's

needs over their own'. As with grid 3, this is further abstracted to 'competent-selfish'.

5.15.4. Summary of Grid 15:

With 100% variance, the grid data lacks depth. There is no differentiation between this conductor's perception of herself between element roles, or between herself and her perception of the most expert, or least competent. In the context of personal construct theory, lack of differentiation of the 'self' as an element, makes it hard to contextualise the individual (Bell, 2005) or understand her perceptions of reality (Butt, 2004). This restricts my ability to position her perceptions of expertise in a wider context. In spite of this, the grid facilitates further understanding of the expert conductor on a continuum from experienced.

Grid 16

5.16.1. Overview of Interview:

This British-trained conductor qualified from Keele University 10 years previously. She is 33 years old and works in a multi-disciplinary, special school setting in a management position. In a similar way to the previous interview, there is a certain absence of emotion, and restraint in this conductor's construing.

5.16.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.16.1.,whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.16.2.

Table 5.16.1.

Grid 16: Bipolar construct pairs. Those in **bold** are reversed in Figure5.16.

Emergent Pole Constructs	Implicit Pole Constructs
E1.Not able to motivate	**I1.Very motivating**
E2.Observant	I2.Unobservant
E3.Knowing the individuals	I3.Not knowing the individuals
E4.Willing to learn from others	I4.'Un-openness' to learning
E5.Reflective practitioner	I5.Unreflective
E6.Not being able to see	**I6.Ability to apply knowledge**
E7.Confidence to 'have a go'	I7.Inflexible
E8.Seeing the big picture and the detail	I8.Not seeing
E9.Listener	I9.Don't listen
E10.Create dysfunctional relationship	**I10.Create a functional relationship- orthofunctional**
E11.Using the group	I11.Not using the potential of the group
E12.Dynamic teaching-learning relationship	I12.Unwilling to learn from others

Table 5.16.2.

Grid 16: Question No./ Element Titles.

Ele	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	1	1	7	1	1	7	2	2	7	1	1	7
2	7	7	1	7	7	1	7	7	1	6	7	1
3	7	7	1	7	7	1	7	7	1	7	7	1
4	6	7	1	7	7	1	6	7	1	7	7	1
5	7	7	1	7	7	1	7	7	1	7	7	1
6	1	1	7	1	1	7	1	1	7	2	2	6
7	7	7	1	7	7	1	7	7	1	6	7	1
8	6	7	1	5	7	1	6	7	1	6	7	1
9	6	7	1	6	7	1	6	7	1	6	7	1
10	1	1	7	1	1	7	1	1	7	1	1	7
11	6	7	1	6	7	1	6	7	1	**1**	**1**	7
12	7	7	1	7	7	1	7	7	1	7	7	1

Using Idiogrid software, PCA analysis determines one component. This explains 92.57% of the variance with an eigenvalue = 11.11. The relationship between the elements and constructs is demonstrated in the 2D Idiogrid representation (Figure 5.16). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component, which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. This conductor perceives herself as pedagogue (SP). This is reflected in the Idiogrid (Figure 5.16 below) in which SP is close to MEP. It can be seen that MEC and SC are separate to the other ME and Self elements. This appears to be related to an incorrect data insertion in response to Q 11. This error is noticed too late to change with the conductor, and whilst it impacts quantitative analysis, thematic analysis continues with the belief that this is a genuine error, and so should not impact thematic analysis (Jankowicz, 2004). Analysis continues with a heavy focus upon the qualitative aspects.

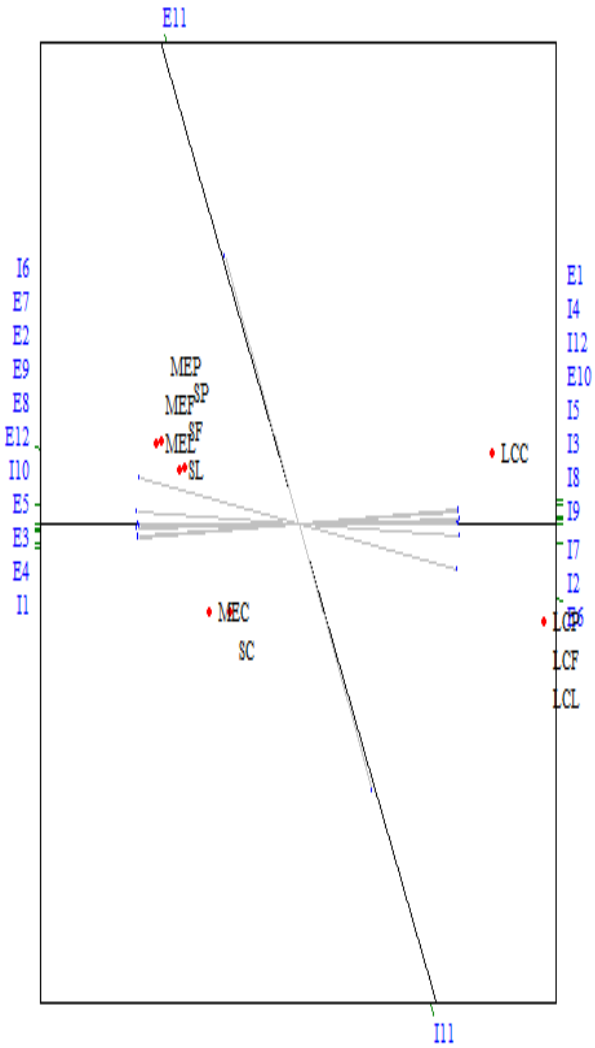


Figure 5.16 Gird 16. Idiogrid representation.

5.16.3. Qualitative Analysis:

5.16.3.1. Priority:

When discussing her priority at the end of the interview, this conductor articulates that "observing feeds into everything, the big picture and the detail….listening to others, observing

and using that to inform practice". Observation is not just a skill, but forms part of reflective practice; "active observation, with purpose, impacts motivation, reflective practice and ability to use the group more, learning from children and the staff". In contrast least competent observation is described as "inactive". This conductor's priority reflects the links she makes between professional skills and their application with impact upon the relationship. The bipolar priority for this grid is summarised as 'active observation informs reflective practice-passive observation has no impact upon learning'. This is further abstracted to 'reflective practice-passive observer'.

5.16.3.2. Initial Coding:

The construct pairs (Table 5.16.1.) within this grid create insight into this conductor's perception of the pedagogical relationship. There is a strong theory-practice link, that relates to a combination of knowledge and application of the conductor's personality. The bipolarity of the constructs facilitates understanding of observation; 'observant-unobservant' (Q2), 'not being able to see-ability to apply knowledge' (Q6), 'seeing the big picture, and the detail-not seeing' (Q8). There is a focus on listening (Q9), on knowing the individual (Q3), on ability to use the group to see

potential (Q11), and in the creation of the teaching-learning relationship, articulated positively as 'dynamic' (Q12) and negatively as 'functional' (Q10). There is an awareness of a need to use personality to motivate (Q1), to 'learn from others' (Q4), to use 'confidence' (Q7), and to 'reflect' upon practice (Q5).

5.16.3.3. Focused Coding:

This conductor prioritises the relationship with the learner, perceiving a "link between teaching and facilitating and the need to be able to facilitate yourself and be effective in order to be able to teach others" (Q10). There is a strong link between the element roles, and an overlap of skills between them. For example the "leader needs to be practical and have the skill of facilitation to enable others to develop their facilitation"(Q7), whilst "leading, teaching, and facilitating are pivotal" (Q8, 9). She perceives that a level of "hands-on experience" (Q7), is important, and recognises that the conductor must have "confidence in themselves" (Q7), "flexibility and courage to have a go" (Q6) as well as a "willingness to learn" (Qs4& 6). Willingness is important; if someone has the "willingness but not the skills, they can develop" (Q11). She connects this to the conductor's desire

to try, "without fear of failing" (Q11), a concept also described by the conductor in grid 13.
As with the conductor in grid 12, there is a connection between "experiencing success and the motivation to learn" (Q10), perceiving that expertise "comes from the self", and that it can be learnt.

For this conductor it is important to "see yourself as communicator…being able to listen, be dynamic and interact" (Q5). In terms of conductive skills, "leading requires good communication" (Q3), described mainly as "facial expression and body language" (Q1), is "part of personality" (Q9), and perceived to be a large part of the teaching dynamic. The ability to communicate effectively enables the individual "to know where you are going" (Q3), and gives the conductor the ability to "understand where people are at" (Q2), and "where they are coming from" (Q9). In contrast, the least competent is perceived to possess "one way teaching and an unwillingness to learn" (Q12). They are described as "inflexible" and "unable to see" (Qs6& 8). For her, if the learner is unable to experience success then they lose the motivation to learn. This "reduces confidence" and subsequently "the relationship becomes dysfunctional" (Q10). These constructs, and the discussions around them,

indicate the need for the expert to have a solid theory-practice link, as well as an ability to reflect upon practice with impact upon their own professional development. With respect to this, the theme for this grid is summarised as 'having the confidence, knowledge and skills to create a positive learning relationship-inability to lead learning due to lack of success'. This can be further abstracted to 'confidence to lead learning-demotivated to learn'.

5.16.4. Summary of Grid 16:

Grid 16 expands understanding of the development towards expertise as a continuum. The skills and personal characteristics of the conductor are underpinned by knowledge of the pedagogy. In particular there is reference to what the conductor brings to the relationship. There is articulation of concepts such as orthofunction, potential and courage. Unlike the conductor in grid 1 however, there is no articulation of belief or an expressed need to create a trusting relationship. Instead, in a similar vein to grids 7 & 14, there is a requirement for self-reflection and a willingness to learn. The constructs support comprehension of competence with a focus upon the skill base, rather than the application of the pedagogy. For this reason, grid 16 joins grids 3, 4 and 8 to expand understanding of expert in the context of experienced, rather than novice.

5.17. Grid 17:

5.17.1. Overview of Interview:

This Hungarian-trained conductor has been qualified for 4 years. She is 28 years old and works with children in a CE centre. This interview is the complete contrast to interview 3. Where there was a perceived lack of emotion, this conductor is fully expressive. She talks about "talent" and "heart", what the conductor brings with them, but also the desire that drives their passion. At the time I feel this is what is missing from the data. The process of analysis however, enables a more reflective consideration of the data.

5.17.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.17.1., whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.17.2.

Table 5.17.1.

Grid 17: Bipolar construct pairs. Those in **bold** are reversed in Figure 5.17.

Emergent Pole Constructs	Implicit Pole Constructs
E1. Don't understand the main aim in CE	**I1.Understand the peoples' needs**
E2.Aware of the needs of the individual	I2.Can't see the person in the group
E3.Need to be able to communicate well within a team	I3.Can't communicate ideas and plans with success
E4. Understanding comes from 'inside' the person	I4.Don't have the 'talent'
E5.Two way communication process	I5.'Don't care' selfish
E6. Won't accept others ideas	**I6.Open minded**
E7.See and know the whole group	I7.Mechanical and not caring
E8.From the 'heart'	I8.Selfish
E9.Reflct on impact of your behaviour on others	I9.Don't care about the impact
E10. Poor observer and lacking knowledge	**I10.Good observer and good knowledge**
E11.Open for other people	I11.Don't care about others feelings
E12.Aiming to get the best out of every situation	I12.No continuity

Table 5.17.2.

Grid 17: Question No. /Element Titles

Ele/	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	2	1	7	2	1	7	2	1	7	3	2	6
2	6	7	1	6	7	2	6	7	1	6	6	2
3	7	7	1	7	5	1	6	7	1	6	7	1
4	6	7	1	7	7	2	7	7	1	6	6	3
5	6	7	1	6	7	1	7	7	1	6	7	1
6	2	1	6	2	2	7	2	1	7	2	1	6
7	6	7	1	6	6	1	6	7	1	6	6	1
8	7	7	1	6	7	1	7	7	1	6	7	1
9	6	7	1	6	7	1	6	7	1	6	7	1
10	2	1	7	2	1	7	2	1	7	2	2	6
11	6	7	2	6	6	1	7	7	1	6	7	1
12	6	7	1	7	7	1	6	7	1	6	7	2

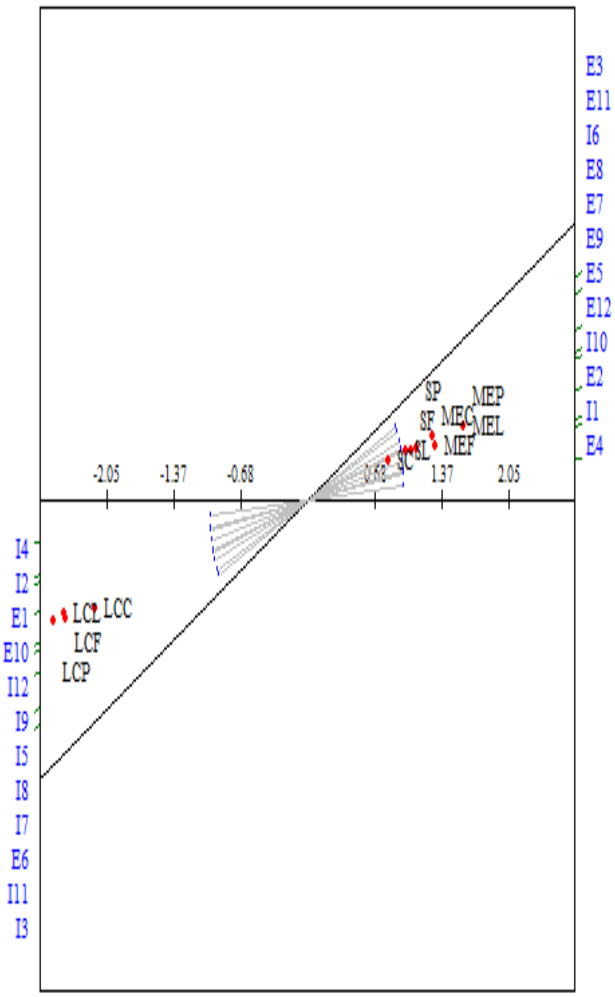


Figure 5.17 Grid 17. Idiogrid representation.

Using Idiogrid software, PCA analysis determines one component. This explains 97.91% of the variance with an eigenvalue = 11.75. The relationship between the elements and constructs is demonstrated in the 2D Idiogrid

representation (Figure 5.17). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component, which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. This conductor perceives herself more expert than least competent, with pedagogue (SP) as her strongest role, and communicator (SC) her weakest. This is reflected in Table 5.17 above and Figure 5.17 in which it is possible to determine the SP further out towards the ME elements and emergent pole constructs, whilst the SC element is closer to the centre.

5.17.3. Qualitative Analysis:

5.17.3.1. Priority:

When talking at the end of the interview this conductor perceives a link between the roles of communicator and pedagogue. To be expert in either of these roles she says it "has to come from inside"; there has to be "the heart". In contrast, it is possible to be an expert leader and facilitator

without the heart. Aspects of these roles can be delivered with good effect, however she perceives the roles of pedagogue and communicator to be underpinned differently. As a result, the priority for this conductor is articulated as "heart and knowledge". In contrast "knowledge is without the heart". This is summarised further to 'head and heart-head only'.

5.17.3.2. Initial Coding:

The constructs (Table 5.17.1.), highlight the impact of a unified use of knowledge and skill upon the learner. For this conductor the role of pedagogue is the most significant. The expert pedagogue is perceived to understand the individual (Qs1& 2). This understanding and 'talent' comes from 'inside' the conductor (Q4), who is not 'selfish' but has 'heart' (Q8). The expert is able to 'communicate well with the team' (Q3), sees communication as a 'two-way process' (Q5) and is 'open minded' (Q6, 11). The expert observes and 'knows the whole group' (Q7) has 'good knowledge' (Q10), 'cares about others' (Q9), and aims to 'get the best out of every situation' (Q12). Linked to all of these is the need to reflect on the impact of their actions (Q9).

5.17.3.3. Focused Coding:
For this conductor, expertise is more than skill alone. There has to be good knowledge and the "heart" (priority). For her, the expert is a pedagogue, with knowledge, skills and a selfless ambition to "get the best results out of every situation" (Q12). She perceives the pedagogue as able to "feel" and to "see people in another way" (Q5), whilst they "show the way and help them understand what and why" (Q4). It is this that "has to come from inside". In a similar way to the conductor in grid 16, she articulates that the "pedagogue is talent……..talent has to come from inside - need to feel you were born for this" (Q8). One way to achieve this is to "measure yourself, reflect on what you are doing and the impact on other people" (Q9). This makes it possible to "learn to develop that talent. This has to do with heart" (priority).

When talking about the element roles, she perceives the expert to be a "good leader and open for others" (Q11). She articulates the characteristics of the good leader as "personality, communication, observation, passion and ability to put yourself in others' shoes" (Q6). She also says that you "can be a good leader if you have knowledge of CE…the leader has to do everything, to know them

more….than the facilitator who can see the people as a group, know their needs and targets" (Q7). For her it is possible to be a "good facilitator but not a leader" (Q6). Equally someone can be a good leader, (but not within CE). To be a "good leader you need to be a good facilitator" (Q6), whilst "observation skills and knowledge" link with being a "good communicator" (Qs7& 11). She perceives that whilst the leader and facilitator roles are interchangeable, the expert is able to flick between them, "aware of the needs and understanding the ideas of CE, how it builds up, understand the levels". Similarly, when she talks about the roles of leader and pedagogue, she perceives that the "leader needs to find the best way to communicate with other people" (Q3) but that "the pedagogue shows the way, helps them understand what and why" (Q4). Again she perceives the roles as interlinked, however being expert in one does not mean that you will be expert in both; "best communicator doesn't mean best pedagogue" (Q5).

In contrast, the least competent "does not understand the main aim in CE" (Q1). They are "selfish" (Q5) and do "not care about others' feelings" (Q11). They will "get lost in leading, can't give feedback" (Q2), and are unable to work with others (Q6). They may have good ideas, but are unable

to communicate them (Q3). They may "have the passion, have the skills but not the thing" (Q4). Similarly they are unwilling to "extend that knowledge" and so their practice is "mechanical" (Q7). The mechanical facilitator "copies things" but because they "don't have the feeling, they won't be confident to put into practice as only know the theory" (Q4). In summary the theme for this grid is 'use of talent, passion and pedagogical knowledge-selfish and mechanical'. This can be further abstracted to 'pedagogical application-mechanical delivery'.

5.17.4. Summary of Grid 17:

This interview adds to the range of perceptions of expertise. Expert practice is linked to the role of pedagogue with a focus upon the conductor's desire to use their "talent and personality" rather than specific skills, knowledge or application. In order to achieve expertise, this conductor identifies willingness and a desire to actualise talent, be that inherent or learned behaviour. For her, absence of the heart means mechanical practice. Whilst the leader and facilitator roles can be applied without the heart, the roles of pedagogue and communicator cannot. Selflessness and passion relate neither specifically to the pedagogy, nor level of expertise. As a consequence, it is not possible to define the tacit aspects of expert behaviour beyond that of talent.

This interview perceived to be the polar opposite of grid 3, expands and builds upon the thoughts of others. In particular it creates greater understanding of the non-expert, and of the belief that, if the conductor is sufficiently willing, expertise can develop.

5.18. Grid 18:

5.18.1. Overview of Interview:

This 37-year-old Petö-trained Hungarian conductor has been qualified for 12 years. She works in a CE centre with both children and adults. She has a senior position within the team, and is the fifth and final conductor to be interviewed from the same centre as the conductors in grids 6-9. The interview takes place at the conductor's request and satisfies her interest in the project, whilst it fits my aim to interview 20 conductors. This interview is unique; there are few similarities with the perceptions of her peers. Instead she brings a perspective of expertise, in the context of the wider political and cultural aspects associated with the delivery of CE in 21st century Britain.

5.18.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor, during the interview are itemised in Table 5.18.1., whilst the rating scores for each element, against each bipolar construct pair are shown in Table 5.18.2.

Table 5.18.1. Grid 18: Bipolar construct pairs. Constructs in bold are reversed in Figure 5.18.

Emergent Pole Constructs	Implicit Pole Constructs
E1.Lack of skills	**I1.Clear communication**
E2.Understanding individual needs	I2.Self absorbed and lack of CE knowledge
E3.Communicating at appropriate level	I3.Not understanding the individual needs
E4.Appropriate knowledge and ability to use it	I4.Not having the knowledge or using it
E5.Ability to adapt to culture to get success	I5.Rigid and unable to adapt
E6.Inability to respond	**I6.Able to recognise and respond**
E7.Recognising needs	I7.Not recognising needs
E8.See the bigger picture-think strategically	FI8.ocus on 'hands on' task
E9.Knowing how, what and when to be effective	I9.Lack of knowledge and how to communicate
E10.Not understanding human interaction	**I10.Understanding human interaction**
E11.Make everyone feel important	I11.Insignificant member of group
E12.Ability to create enabling atmosphere	I12.Clinical atmosphere

Table 5.18.2.

Grid 18: Question No. / Element Titles

Ele/	SL	MEL	LCL	SF	MEF	LCF	SP	MEP	LCP	SC	MEC	LCC
1	2	1	7	1	1	7	2	1	7	2	1	7
2	7	7	1	7	7	1	6	7	1	7	7	1
3	7	7	1	7	7	1	6	7	1	7	7	1
4	6	7	1	6	7	1	6	7	1	6	7	1
5	6	7	1	7	7	1	6	7	1	6	7	1
6	1	1	7	1	1	7	2	1	7	2	1	7
7	7	7	1	6	7	1	6	7	1	6	7	1
8	7	7	1	7	7	1	7	7	1	6	7	1
9	7	7	1	7	7	1	6	7	1	7	7	1
10	1	1	7	2	1	7	2	1	7	2	1	7
11	7	7	1	7	7	1	7	7	1	7	7	1
12	7	7	1	7	7	1	7	7	1	7	7	1

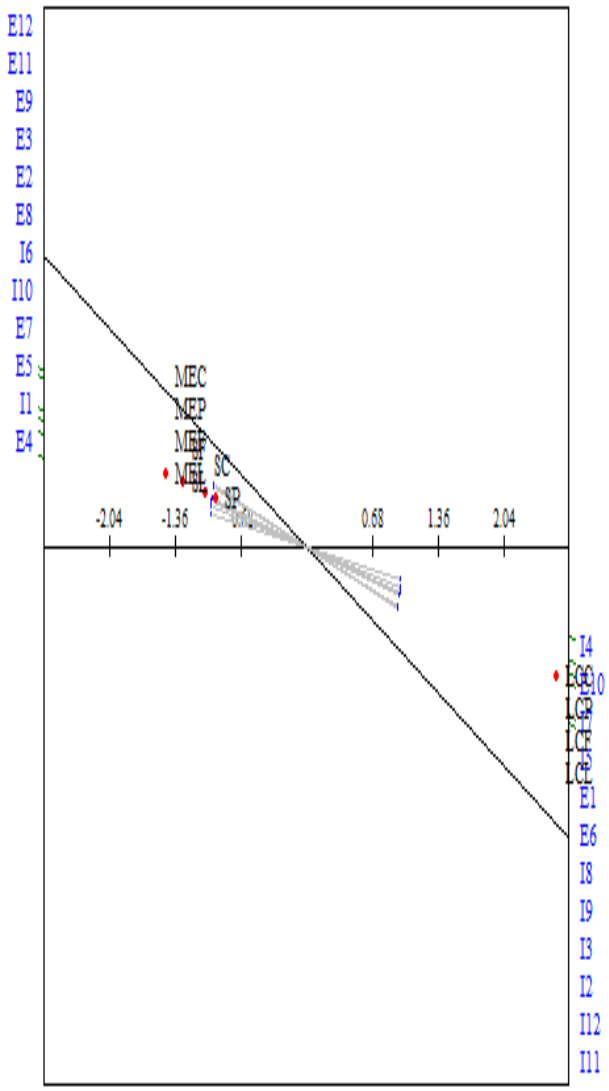


Figure 5.18 Grid 18. Idiogrid representation.

Using Idiogrid software, PCA analysis determines one component. This explains 99.31% of the variance with an eigenvalue = 11.92. The relationship between the elements and constructs is demonstrated in the 2D Idiogrid

representation (Figure 5.18). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component, which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. This conductor perceives herself strong in all element roles, but weakest as pedagogue (SP). This is evident in Figure 5.18 in which SP is seen closed to the centre of the diagram, with the other self-elements close to the ME elements, and emergent pole constructs. The LC elements are all closely connected to the implicit pole constructs.

5.18.3. Qualitative Analysis:

5.18.3.1. Priority:

The response given towards the end of the interview in Q12 focuses upon the atmosphere and the expert's 'ability to create enabling atmosphere-clinical atmosphere'. This is expanded upon in the priority and stated as; "create positive atmosphere, enabling people to learn, give people a boost". This is abstracted to 'positivity'.

5.18.3.2. Initial Coding:
Pedagogy is at the core of this conductor's perception of expertise. The construct pairs (Table 5.19.1) detail the characteristics of the expert who communicates well (Qs1& 3) and creates a positive atmosphere (Q12) in which everyone feels important (Q11). The expert adapts (Q5) and responds (Q6), they have the theoretical knowledge (Qs2,4,5&9), and personal knowledge of the individual (Q2, 7, 10). They think strategically and pragmatically (Q8).

In contrast the least competent is self-absorbed (Q2), rigid and inflexible (Q5). They lack the knowledge (Q4), skills (Q1) and understanding (Qs7& 3) to respond (Q6) and communicate (Q9) with positive impact. They are perceived to be insignificant within the group (Q11), create a clinical and functional (Q8), rather than personal atmosphere (Q12) and find it hard to understand at a personal level (Q10).

5.18.3.3. Focused Coding:
This conductor's belief in CE and knowledge of the underpinning pedagogy impacts her relationship with the learner. It also influences her ability to create a positive atmosphere. She continually strives to bring together skills and knowledge. Knowledge in itself is not enough, the

conductor has to know when to, and be able to apply that knowledge (Q4). Good facilitation includes knowledge of "how to achieve goals" with "clear expectations" (Q12). This demands "hard work" but you will know that "you (the learner) are the most important" (Q12). She feels that the conductor "need(s) to be a good facilitator to be a good leader" (Q2). The "facilitator is humble" rather than 'self-absorbed or blind' (Q2). For her "pedagogy is the key" (Q10). This is in the context that the expert understands "their own profession", that CE is an "educational approach", and that "facilitation is not just manual" (Q12), but has a "much wider definition". She reflects upon the pedagogical role; to show the individual "how to succeed", by having the "knowledge and ability to communicate everything…….understanding the consequences and knowing how to react" (Q9). The expert "understand(s) the human being and human behaviour" and uses "non-verbal communication" (Q10). For her, communication is 60% non-verbal and 40% verbal (Q11). Effective use of this, based upon understanding of the individual helps "keep the group together. Everyone feels important, that your attention is with them and so no-one feels left out" (Q11).

As in other grids there is a focus upon addressing the learner's needs, however much is made of the need to adapt

the information that is given, for example "knowledge and the ability to use it and communicate" (Q5) is based upon "understanding the needs of the person". She talks about "books and experience" (Q5) and an ability to "translate from Hungary" the knowledge and the application of that knowledge. She recognises the "strictness" (Q5) within CE as she learnt it, and that the expert needs to "continually be able to change and adapt, to be able to recognise that change and respond to it" (Q6). She talks at length about the impact of the culture upon the delivery of CE (Q8). "The principle is the same…the belief is the same but how you achieve has changed…have had to change the regime of CE…..CE is evolving ….changing to adapt to the expectations of the parents". It is important to recognise what the "parents want". This is "challenging but achievable" (Q8). Flexibility (Q6) transcends the group dynamic, and increases awareness of the cultural differences between populations and generations. The conductor has to be able to "combine skills, think strategically, have a future vision and utilise all the elements….see and memorise, think ahead, linking the picture together. All happening together, observing, thinking and reflecting" (Q8). This flexibility is considered essential if the conductor is to 'adapt to the culture to gain success' (Q5).

She thinks strategically and understands that expert practice is not just based upon "skills, cognition and reflection" (Q8), but upon a strong pedagogical understanding and interpretation. This is reflected in the construct pair (Q8) 'see the bigger picture-think strategically-focus on hands on task', and later 'knowing how, what and when to be effective-lack of knowledge and how to communicate' (Q9). In contrast there is "information overload" (Q3). There is "no knowledge and don't know what to say" (Q9). There is a "lack of CE knowledge" (Q2, 7) "lack of skill"(Q10) and a "lack of understanding of their own profession" (Q10) which is linked to a relative "blindness" (Q2) of what is around them and the needs of those in the environment.

The theme for this grid is defined 'holistic application of CE-inability to adapt to the needs of the population'. This is further abstracted to 'holistic perspective-inflexible'.

5.18.4. Summary of Grid 18:

This conductor presents a wide perspective on the skills, knowledge and adaptability of the expert conductor. She considers the element roles in the context of the individual, and recognises the significance of the team. The team

however plays a much smaller role in her construing than that expressed by her colleagues (grids 6-9). Her constructs reflect her pedagogical understanding and strategic thinking. In this way this grid is unique. Her belief in the pedagogical potential within CE influences her ability to adapt to the needs and expectations of the population at large, even though they are very different to those of the society in which she trained. The specifics of her belief are not expanded upon. She demonstrates however that without the belief, knowledge and skills alone are insufficient to adapt to the needs of the individual.

5.19. Grid 19:

5.19.1. Overview of Interview:

This conductor is newly-qualified from the University of Wolverhampton. She is 40 years old, and works with both adults and children in a CE centre. With little professional experience, this conductor articulates her perceptions of expertise at a personal level. She perceives CE as pedagogy and considers its application in the group setting. This interview however is memorable for her personal insights, in particular the ways in which she has applied CE in her own life. She articulates how she has changed as a person, and attributes this change to the conductor training that she has

just completed. In particular, she describes her ability to problem solve, and become as she sees it, orthofunctional (see glossary). This is considered a unique feature of the interview. This conductor is quietly determined and confident. Despite qualifying recently she perceives she has something to offer, and is confident to say it. As with all other interviews I ask that she consider real individuals when referring to the elements. She is unable to do this, or relate to anyone specifically.

5.19.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.19.1., whilst the rating scores for each element against each bipolar construct pair is shown in Table 5.19.2.

Table 5.19.1.

Grid 19: Bipolar construct pairs. Constructs in **bold** are reversed in Figure5.19.

Emergent Pole Constructs	Implicit Pole
E1.Poor connection	**I1.Good link between conductor and participant**
E2.Good observation	I2.Poor observation
E3.Able to observe and respond to needs	I3.Self centred- not open
E4.No belief in the person	**I4.Belief & skills-orthofunction**
E5.Ability to develop trust	I5.Self centred not open
E6.Not listening/ remembering	**I6.Puts all knowledge together**
E7. Ability to anticipate	I7.Not able to understand the persons' needs
E8.Good observation	I8.Missing potential not seeing
E9.Ability to facilitate problem solving	I9.Not expect development of orthofunction
E10.Not believing in the persons' ability to learn	**I10.Belief in the person**
E11.Good observation of movement	I11.Not paying attention to the detail
E12.Ability to see the person as a whole	I12.Seeing only one aspect of the persons' needs

Table 5.19.2.

Grid 19: Question No. s/ Element Titles.

E/C	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	2	2	7	2	1	7	2	1	7	3	1	7
2	6	7	1	6	7	1	6	7	1	5	7	1
3	6	7	1	6	7	1	7	7	1	6	7	1
4	2	1	7	2	1	7	3	1	7	3	1	7
5	5	7	1	5	7	1	5	7	1	5	7	1
6	3	1	7	2	1	7	3	1	7	3	1	7
7	5	7	1	6	7	1	6	7	1	5	7	1
8	5	7	1	6	7	1	5	7	1	5	7	1
9	7	7	1	7	7	1	7	7	1	7	7	1
10	1	1	7	1	1	7	1	1	7	2	1	7
11	5	7	1	6	7	1	6	7	1	5	7	1
12	5	7	1	6	7	1	6	7	1	5	7	1

Using Idiogrid software, PCA analysis determines one component. This explains 98.49% of the variance with an eigenvalue = 11.82. The relationship between the elements and constructs is demonstrated in the 2D Idiogrid

representation (Figure 5.19). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component, which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. This conductor whilst newly qualified, perceives herself closer to the ME than the LC elements as can be seen in Figure 5.19 below.

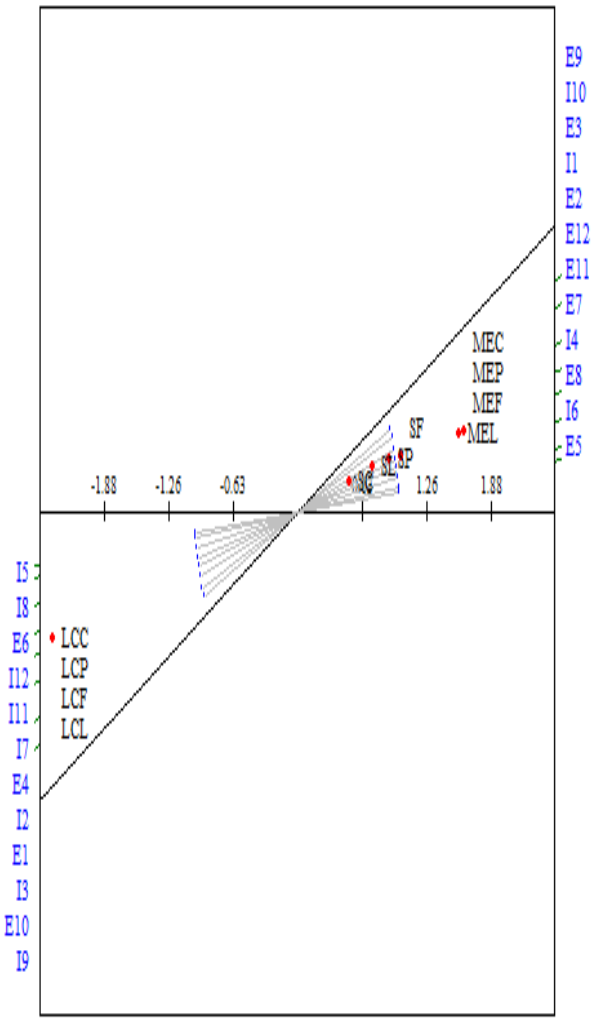


Figure 5.19 Grid 19. Idiogrid representation.

5.19.3. Qualitative Analysis:

5.19.3.1. Priority:

The priority for this grid (articulated at the end of the interview) is articulated as "belief in potential……trust and development, aiming for orthofunction". She articulates the need to "observe other conductors and how they talk", and perceives that if it is possible to "instil belief in the conductor then everything comes together". This belief impacts her perception of herself. As a consequence her observation of herself has changed; in "applying CE skills to myself I perceive my own life differently". In particular this relates to her ability to find solutions. This is expressed as: 'belief in potential drives solution focused living'. This is further abstracted to 'transformative living'.

5.19.3.2. Initial Coding:

The constructs (Table 5.19.1.) outline a perception of the whole person and the pedagogical processes which impact the conductor role. The conductor, as an individual and professional, is considered a part of this whole. To be expert, belief (Qs4&10) in the individual and their potential (Qs10& 8) is both the beginning and the end of practice. Belief is perceived to impact application of the pedagogy (Q7) demonstrated in the practical skills (Q4) of listening (Q6),

observing (Qs2,3,8,11&12), remembering (Q6) and setting expectation (Q9). All of this is dependent upon the trusting relationship (Qs5& 1) constructed with the learner.

In contrast, the least competent neither listens nor remembers (Q6) and finds it difficult to connect with the individual (Q1). They lack the belief (Qs4& 10), and cannot see the whole person (Q12). They miss the detail (Q11), the potential (Q8), they do not expect development or change (Q9), do not understand the individual (Q7) and are unable to anticipate what they might need (Q7). They think only about themselves (Qs3& 5) and shut themselves off from the learner (Qs1,2,6 &7), colleagues and learning opportunities (Q9).

5.19.3.3. Focused Coding:

This conductor perceives CE as uniquely holistic. Significantly she states "other professions focus on the whole…in CE look at wholeness" (Q4). Later she qualifies this by talking about the expert's "ability to see the person as a whole". This is reflected in her constructs; 'put all knowledge together-not listening or remembering' (Q6), 'ability to see the person as a whole-seeing only one aspect of the person's needs' (Q12). For her, personal development is a part of this wholeness.

She perceives it is important for conductors to learn to change, and that CE can impact the conductor as much as the individual. The relationship with the learner is a two-way process; "participants can feel trust and support" (Q5). This is essential if the conductor is to "find a way to reach the person". Observation creates an "opportunity to teach" based upon "what is happening and what the person needs" (Q8). It is essential to "see potential" and "facilitate intention…believing in the person's ability to learn" (Q10). Significantly, she recognises the "change inside the conductor that facilitates that belief" (Q10) as a necessary part of the learning.

The interview data highlights her own perceived strength as pedagogue and newly qualified conductor. She perceives the conductor as significant within the pedagogical process. She talks about "communication" (Q3) and its importance in being able to "lead the group so everybody follows you". The expert is perceived to believe (Qs4& 10) in the individual, in their ability to learn (Q9), and "that neurological problems can be relearned"(Q4). Belief alone however is insufficient by itself, it must be "supported by knowledge" (Q4) which enables the individual to "develop orthofunction; confidence and self-esteem" (Q4). She describes these as "invisible

outcomes” (Q4). The theme for this grid is determined as ‘pedagogical application develops wholeness- disbelief creates dysfunction’. This can be further abstracted to ‘pedagogical wholeness-dysfunction’.

5.19.4. Summary of Grid 19:

This newly-qualified conductor presents unique realities; the perception of wholeness and application of CE at a personal level. The detail contained within the interview gives weight to the impact of life experience, and its potential to influence professional development. This holds relevance for the development of the tool, and demonstrates that experience of life plays a role in professional development.

5.20. Grid 20:

5.20.1. Overview of Interview:

This 28-year-old Hungarian conductor qualified from the Petö Institute 5 years previously. She has a range of experience with children, and currently works in a CE centre with adults. The interview takes place immediately prior to the summer holidays. The conductor is tired but happy to participate in the interview. This is the final of the 20 interviews and

serves to unite many of the perceptions of the other 19 conductors interviewed.

5.20.2. Overview of Data and Quantitative Analysis:

The construct pairs generated by this conductor during the interview are itemised in Table 5.20.1., whilst the rating scores for each element, against each bipolar construct pair is shown in Table 5.20.2.

Table 5.20.1.

Grid 20: Bipolar construct pairs. Constructs in **bold** are reversed in Figure5.20.

Emergent Pole Constructs	Implicit Pole Constructs
E1.Not paying attention	**I1.Paying attention to the whole**
E2.Observant	I2.Unobservant
E3.Ability to connect/ get through	I3.Don't feel the group/ person
E4.Not understanding the educational role	**I4.Use experience to develop personal and professional role**
E5.Use of non-verbal communication	I5.Not using non-verbal communication
E6.Not seeing the whole	I6.Seeing the bigger picture
E7.Working towards the same aim	I7.Letting personal differences take over
E8.Adapting to the situation	I8.Inability to adapt
E9.Observation of the psychological	I9.Carelessness (disinterested)
E10.Not wanting to see the potential	**I10.Believing and enabling the achievement of potential**
E11.Use of non-verbal communication	I11.Ignoring the non-verbal
E12.Aiming to keep everything together	I12.Letting things fall apart

Table 5.20.2.

Grid 20:

Question. No. s/ Element Titles												
Ele/Con	**SL**	**MEL**	**LCL**	**SF**	**MEF**	**LCF**	**SP**	**MEP**	**LCP**	**SC**	**MEC**	**LCC**
1	2	1	6	3	2	5	3	1	5	3	1	5
2	6	7	2	6	7	3	6	7	2	5	7	3
3	6	7	3	6	6	2	6	7	3	5	7	4
4	2	1	6	2	1	5	2	1	5	3	1	5
5	6	7	2	6	7	3	6	7	3	6	7	3
6	3	1	6	3	1	7	3	1	6	3	1	6
7	4	6	3	4	6	3	5	7	3	4	7	3
8	6	7	3	6	7	4	6	7	4	5	7	4
9	6	7	4	6	7	4	6	7	3	6	7	5
10	1	1	3	1	1	3	1	1	3	2	1	4
11	6	7	3	6	6	4	6	7	3	6	7	4
12	6	7	4	6	6	4	6	7	4	6	7	5

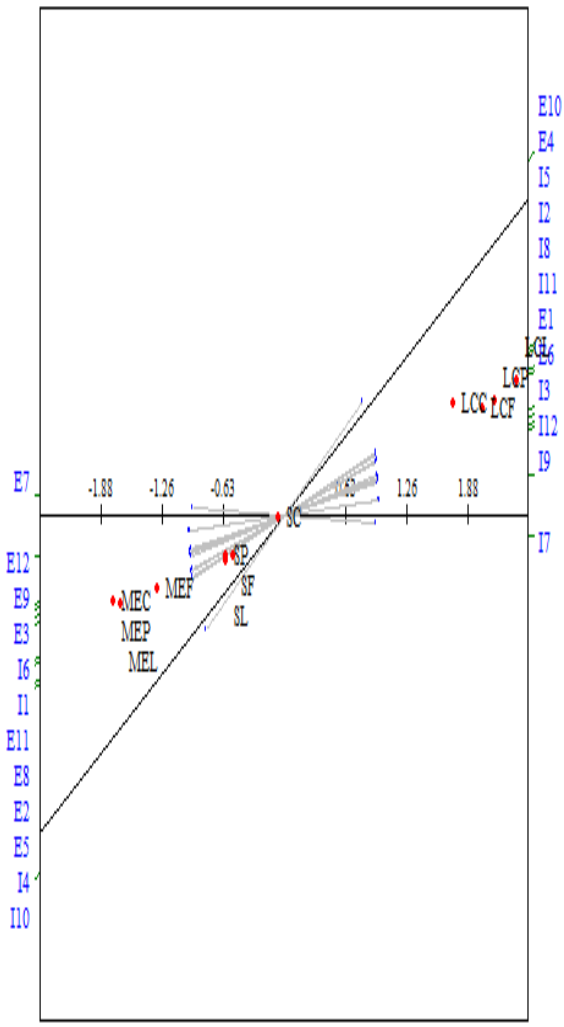


Figure 5.20 Grid 20. Idiogrid representation.

Using Idiogrid software, PCA analysis determines one component. This explains 93.63% of the variance with an eigenvalue = 11.24. The relationship between the elements and constructs is demonstrated in the 2D Idiogrid

representation (Figure 5.20). The axes are acute, with a small angle between them. This reflects the correlation between the constructs and represents the variance on the first component (Leach, Freshwater, Aldridge & Sunderland, 2001). This supports the PCA findings of one component which suggests a reduced level of cognitive complexity (Bell, 2004). These findings inform further analysis, the aim of which is to determine a single theme from the constructs within the grid. This conductor aligns herself more closely to the ME elements, in particular ME facilitator (MEF). Communication (SC) is perceived a weakness as can be seen in Figure 5.20, with SC closest to the centre. As with other grids, the LC elements are closest to the implicit pole constructs.

5.20.3. Qualitative Analysis:

5.20.3.1. Priority:

Identified at the end of the interview, belief in the philosophy and concept of CE is the priority for this conductor. Unlike the conductor in grid 19, she is unable to apply this belief to herself. A priority is constructed as 'belief in CE and those around you increases motivation'.

5.20.3.2. Initial Coding:
With reference to the constructs (Table 5.20.1.), there is an emphasis upon observation, construed as 'observant' (Q1), 'seeing the bigger picture' (Qs2& 6), 'observation of the psychological' (Q9), 'not wanting to see the potential' (Q10). Non-verbal communication skills are also considered important, construed as 'ability to connect' (Q3) and 'use of non-verbal' (Qs5& 11). The impact upon the conductor's professional development within the team is expressed as 'working towards the same aims' (Q7) and 'aiming to keep everything together' (Q12). At a personal level, there is a need to 'use experience to develop personal and professional role' (Q4), and 'adapt to the situation'. In contrast, the least competent does 'not pay attention' (Q1), 'observe' (Q2, 6), 'connect' (Q3), or 'understand the educational role' (Q4). They 'let things fall apart' (Q12), do not 'want to see the potential' (Q10), and 'let personal differences take over' (Q7). Where others have perceived the expert to be willing (for example, grid 8), this conductor identifies the least competent as 'disinterested' (Q9).

5.20.3.3. Focused Coding:
The constructs expand this conductor's understanding of the pedagogical role (Q4), which she perceives to be the most

significant. Belief (Q10) is generated from the underpinning philosophy, and its application (Qs7& 8) is played out in the relationship with the learner. The pedagogical element is explained as the "conductor equals pedagogue" (Q4). She also articulates that the "pedagogue inspires" and impacts at the "holistic" personal level. In contrast, "teaching equals knowledge". This she perceives to be "mechanical" (Q4). She perceives the expert to be someone who "inspires" and sets a "good example" (Q4). She also perceives experience to be relevant, however this "depends upon how much it is in your heart" (Q4). This reflects the feelings of the conductor in grid 17, in which talent, heart and passion were considered significant aspects of expertise.

The pedagogical position is the focus for all interaction whilst the expert needs to be able "to get through to the individual, so that "they will let you in" (Q3). They are then able to "feel the person" and adapt to them (Q3). In contrast the least competent "does not feel the person/group, does not understand the person, or what you have to do for them to let you in" (Q3). This is strategic, and highlights the need for the conductor to see, feel and respond at a human, interpersonal level, rather than in a guarded, professional manner. She recognises the importance of the non-verbal

elements of communication, the ability to "feel the mood and atmosphere on the day…so that you know when to make a joke and when to be serious" (Q5). She also refers to the need for non-verbal communication between conductors (Q7), in particular between facilitator and leader. This reflects the articulations of the conductor in grid 13, in which he defines the impact of expert communication as "magic". In contrast, use of verbal communication only creates a mechanical interaction, which she defines as an ability to "facilitate to achieve" but without the belief (Q10). The expert "believes in potential and wants to achieve it" (Q10).

When talking about the team, this conductor considers that both leader and facilitator roles need to have a "good and common understanding…based upon experience with each other….and an attempt to put personality aside…..both working towards the same aim" (Q7). She differentiates the roles, whilst also seeing them as united; the role of facilitator is essential in "facilitating the aim of the session" (Q12), and "facilitating the leader, the others in the group and the communication between the others" (Q12). She talks about the skills of the communicator, and asks if "language is needed for good communication?" (Q5). She recognises that there needs to be "good communication

between the leader and the facilitator" and that "use of non-verbal enables knowledge of what each wants/needs" (Q7). Linked to communication is observation. The expert is a skilled observer, "of the whole group and the leader" (Q1). "Observation is not just about the movement, but about how they look at you". By use of "intuition" it is possible to "feel" (Q5), "not just movements, how they look at you, read and connect…seeing the person/situation as a whole….using your own personality to create an atmosphere between the individuals" (Q5). This relates to the need for motivational input from the conductor which comes from an ability to "look at the emotional, at humanity". In contrast the least competent does "not look at the people" (Q12).

When she reflects upon her own practice, this conductor recognises the impact of the relationships within the team, however is unable to determine which has the bigger impact; "don't know how much is the team and how much is me…..at the Petö Institute, it was more automatic, less personalised……coming here brought out my personality" (Q12). These articulations suggest this conductor knows that she wants her personality to develop further, but feels restricted in the team and is unsure of how to address these issues. This reflects the articulations of the conductors in

grids 6-9 in which the team is perceived as significant at both personal and professional levels, each having an impact on the other. The bipolar theme for this grid is defined as 'use of pedagogical belief to guide learning-disconnect from the pedagogy, blocks relationship'. This can be further abstracted to 'pedagogical application-disconnection'.

5.20.4. Summary of Grid 20:

This conductor recognises the need to work together for the good of the whole. Whilst this conductor has belief in the philosophy and in other people's potential, she is however unable to articulate belief in her own potential, or how she could use the philosophy of CE to influence her own development.

5.21. Searching for Meaning:

In order to search for meaning in the data,

> …..the speaker must mean something. The listener must look beyond the literal symbolism and construe the speakers' personal construction (Kelly, 1963, p. 114).

In order to 'listen' to the conductors, I remain as close to the original grid data as possible (Jankowicz, 2004; Burr, King & Butt, 2012). In keeping with the mixed-methods approach of this study, this chapter highlights the quantitative and qualitative findings held within each individual grid. One component is determined by the PCA analysis in 19 of the 20 grids (grid 15 is inconclusive). The themes are summarised in Table 5.21 This influences subsequent thematic analysis, informed by Constructivist Grounded Theory (Charmaz, 2006, 2017) and enables meaning to be generated by utilisation of articulated constructs, supporting notes and observations. The process of thematic analysis discussed above, underpins the following chapter, in which synthesis aims to generate new ideas and insights to the findings (Webb, 1992; Wink & Putney, 2002; Woods, 1999).

Table 5.21

Summary of grid and bipolar theme

Grid no.	Bipolar theme
1	Use of personality to lead learning-no connection blocks learning
2	Belief strengthens trust- disbelief increases fear
3	Competent-restrictive
4	Sensory awareness creates emotional safety-inability to observe increases mechanical response
5	Holistic-fragmented
6	Holistic approach to lifelong learning-isolationist prevents learning
7	Desire to learn and to lead learning-defensive use of communication skills restricts learning
8	Willingness to use experience and knowledge to teach-unwilling to learn how to teach
9	Personal application leads learning-mechanical response restricts learning
10	Use of personality to lead learning-mechanical application of knowledge
11	Reflective practice increases learning-mechanical practice destroys learning
12	Application of the belief-no expectation
13	Intuitive communication-unconfident interaction
14	Reflexive pedagogical relationship-inability to respond
15	Competent-selfish
16	Confidence to lead learning-demotivated to learn
17	Pedagogical application-mechanical delivery
18	Holistic perspective-inflexible
19	Pedagogical wholeness-dysfunction
20	Pedagogical application-disconnection

6. NARRATIVE SYNTHESIS OF FINDINGS

6.1. Introduction:

At the end of their book, Wink and Putney (2002, p. 167) cite The Talmud (Yeager, 1999).

> To look is one thing.
> To see what you look at is another.
> To understand what you see is a third.
> To learn from what you understand is still something else.
> But to act on what you learn is
> All that really matters.

With a focus upon observation, comprehension and action, Wink and Putney's (2002) conclusion acts as a suitable beginning for this chapter. Synthesis, as a process of invention, rather than discovery (Kelly, 1958), makes it possible to reconstruct the whole, rather than fractionated parts (Charmaz, 2006). In the previous chapter, individual conductors' perceptions of expertise are identified. The focus of this chapter is upon the thematic synthesis of these 20 conductors' individualised perceptions of expertise. The synthesis of constructs and interview data determines that it

is possible to identify common themes. These themes reflect the conductors' perceptions of expertise as holistic in nature, and of the parts that combine to create this holism; belief, personality, knowledge and skill.

If construing is associated as much with feelings and actions than with cognitive processing (Fransella & Neimeyer,2005), the synthesis of findings similarly reflects an ability to move between the detail of the text and its wider contextual meaning (Butt, 2004). With the aims of this study in mind, knowledge of the wider context serves to influence the development of the measurement tool (chapter 7), as a means of increasing conductors' awareness of expertise as an achievable goal (chapter 8). This chapter focuses upon the conductors' perceptions of expertise as holistic, and of the factors that influence their construing. Included within this are the experiential influences associated with the working environment (Eraut, 2004), and aspects of the developmental journey from novice to expert (Benner, 1984; Dreyfus & Dreyfus, 1986). It is not an aim of this study to identify stages of development, however as evidence of the stages evolves from analysis and synthesis of the conductors' perceptions of expertise, it is deemed appropriate to highlight the journey of professional development as an influence upon

perceptions. Synthesis of the data in this way, has potential to influence the construction of the measurement tool so that conductors are facilitated to develop regardless of their level of experience, or perceived stage on the continuum.

6.2. Perceiving Expertise:

Utilisation of bipolar construct pairs generates rich data, by generating subjective data (Burr, King & Butt, 2012) representative of conductors' perceptions of both expert and non-expert practice. The data from the individual grids is synthesised using an iterative process of thematic analysis (see appendix 1.3). Each grid is analysed in turn, adding to the common themes until a representative synthesis of data is generated. This is summarised in Table 6.1 and represented in Figure 6.1.

Table 6.1. Thematic synthesis of themes into categories

Category	Theme	Grid
Belief	Belief strengthens trust, sets expectation	2,12
Personality	Personality, leads learning, is willing, holistic perspective	1,8,9,10,18
Knowledge	Intuition, lifelong learning, reflective, knowledge, pedagogical application, holistic application	5, 6,7,11,13, 14,17,19,20
Skill	Competent, safety, experience, communication, confidence, strategic approach, holistic application	3,4,15,16

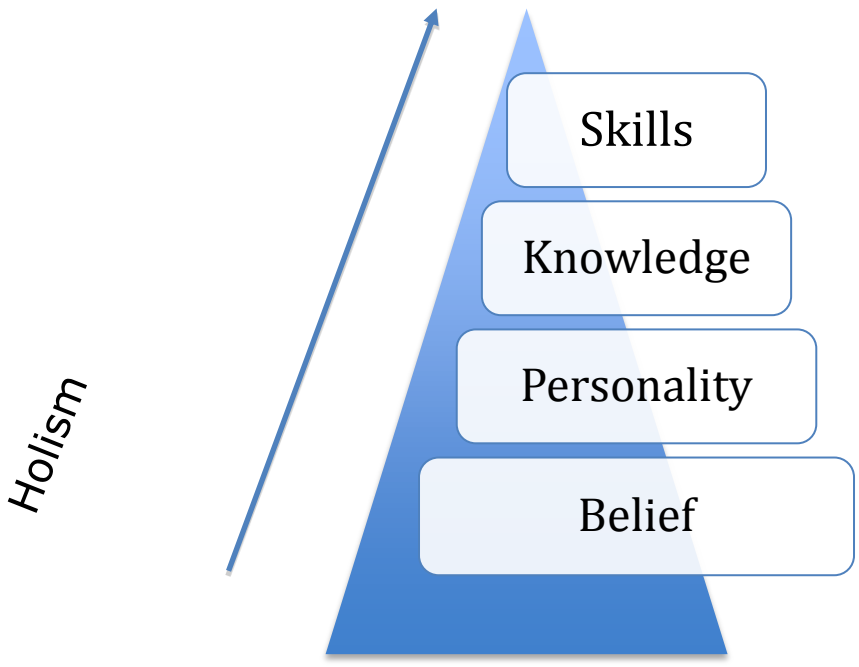


Figure 6.1. Thematic synthesis; Conductors' perceptions of expertise.

The synthesis of findings indicates that conductors perceive expertise to be holistic in nature, underpinned by the conductor's belief system. This is perceived to influence application of their personality, knowledge and skill. Each of these categories are explored in turn. In this way it is possible to consider expert practice as perceived by the 20 conductors interviewed. Whilst Table 6.1. and Figure 6.1. present the data in a unipolar state, the synthesis of data creates knowledge of the conductors' perceptions of expert in the context of least competent. This is summarised in appendix 1.3.1.

6.2.1. Belief as an Underpinning Component:

Expertise is associated with philosophical and psychological aspects of practice (Kelly, 1963; King et al., 2014). The philosophical aspects of CE, perceived as expert practice, are best categorised as belief. The conductor's belief is perceived negatively, being likened to a religion (Best, 2010; Oliver, 1989), whilst others consider the conductor's belief in the individual, as both positive, and necessary (House, 1968; Feuerstein, 2008; Waiss & Borcsok, 2007). This synthesis determines that belief is perceived to influence everything the expert does and aspires towards. This is reflected in the sympathies of Feuerstein (2008).

> "Need – if I really want my fellow man living in a different level of life – makes me believe that it *will* be possible……belief generated by need is the *sine qua non* – the most important determinant – in reaching out for real achievements…." Feuerstein (2008, p. 6).

The concept of belief as manifested in the articulations of the conductors is significant for its impact upon practice. In particular, belief is perceived to affect the interpersonal relationship.

In particular belief impacts the conductor's ability to set expectations, and support successful learning. Belief, perceived by conductors to have an impact at both personal and professional levels, is identified as a bipolar construct in only 2 grids (2 & 19), (Table 6.2.), however is referred to in eight interviews (1,3,11,13,15,17,18 & 20).

Table 6.2. Belief as construct pairs in grids 2 and 12.

Grid No.	Belief as expert	and	Non-expert practice
Grid 2	Facilitate the learning process		Disbelief that learning is possible
	Communication of trust & belief		Breakdown of trust and belief
	Belief and understanding		Not knowing what to facilitate
Grid 19	Belief in person		Not believe in learning
	Belief and skills		No belief in person

With reference to the bipolar construct pairs identified in Table 6.2. together with the individual grid analysis, belief is perceived to be the underpinning factor from which expert practice develops. For the conductor in grid 2, it is the conductor's belief in themselves to be transformative that supports the development of expertise. For this conductor, belief, passion and inspiration are perceived as connected and interconnected; belief is used to inspire. The conductor in grid 2 differentiates belief from desire. For her, belief is a concrete element of practice. By means of the way in which the conductor's belief in the individual is communicated, belief becomes a transformative tool. In grid 19, the expert's belief in the individual impacts the way in which they themselves perceive the individual as a learner.

Other conductors articulate their perceptions of belief, however this does not translate into a bipolar construct. The conductor in grid 1 talks about the expert's need to believe in the learner's potential. She perceives this as necessary for the conductor to set expectations, and lead learning, and relates her perceptions to her personal experiences of observing Mária Hári in Hungary. The conductor in grid 11, also recognises that the expert must convey their belief if the individual is to learn, change and believe in themselves. The ability to communicate belief is perceived as a challenge by the conductor in grid 15. This conductor recognises that words alone do not convey belief; belief needs to be genuine. This links to the perceptions of the conductor in grid 13 who talks about self-belief. He perceives this to be necessary for the development of confidence, but rather than be empathetic, he is concerned that too much self-belief creates arrogance. For this conductor, self-belief enables the expert to be brave, and to push development, their own as well as the learner's. Self-belief is perceived to be necessary for the conductor to trust in themselves, and to problem solve the situation. In a similar manner to the conductor in grid 2, this conductor perceives the expert to be transformative. Belief is the root of this transformative process.

With recognition of the bipolar nature of the data collected, it is possible to consider the impact represented by a lack of belief. This is first highlighted in grid 3. The conductor articulates constructs that are similar to those expressed by other conductors such as 'enabling', 'trust' and motivator'. What makes this conductor stand out however, is her ability to remain objective when she talks about the positives of CE. Rather than consider "belief as black and white" (grid 2), she articulates that "CE has taught her to look for the positives, for ability, rather than what cannot be done". She does not mention belief at all. Instead she talks about the relationship with the learner in a rather impersonal way. For her, there is no need to be brave, or to challenge herself (as in grid 13), because she works in a team, and uses the skills of the team to address the needs of the individual. This example fits well with the description by Feuerstein, in the sense that need and belief go hand in hand. This conductor is perceived to have a different belief. She has a team who will help problem solve. In this way belief, associated with experience and knowledge, serves to protect the individual within their social context (Jarvis, 2006). This is demonstrated both positively and negatively. Positively, it can create confidence and act as a point from which to explore and develop (grids 2 & 13). For

instance, the conductor's belief system is shown to influence the way in which experience is utilised and practice developed, as described in grid 18. Here the conductor recognises that whilst practice changes to fit the context, her belief system remains constant. Conversely, the conductor's belief system can act as a defence mechanism against change and challenge (grid 3).

Belief, as an abstract construct, however, is no measure of expertise. Belief, used as a transformative force, has the potential to change the lives of both the learner, and the conductor. This is best highlighted in grid 19, where the conductor recognises the need to "instil belief". At a personal level she articulates how the belief system within CE is transformative, and how it enables her to problem solve differently.

These conductors' perceptions and articulations reflect their belief in CE as a transformative pedagogy; belief in the potential of the individual, and belief that they themselves can impact at a transformative level. This influences their relationships and their ability to apply their knowledge, as well as their perception of themselves. For other conductors, belief is not mentioned. Instead there is reference to what is

'inside' the expert. In grid 17 the conductor refers to the 'heart', and perceives that expertise comes from this place, although she is unable to define what she means by this. The conductor in grid 20 however, links learning to how much "it is in your heart". Although neither of these statements are qualified, they are positioned here because they identify an aspect of expertise that appears to links to the "mystery" of expertise that Aydelotte (1984) refers to, in her introduction to Benner's work (Benner, 1984). Mystery is to be valued, not dismissed (Aydelotte,1984; Eraut, 1993). And so it is that in this synthesis, belief is positioned as the underpinning factor in expert practice, and articulated by Kelly (1963) in the following:

> "If we examine a person's philosophy closely, we find ourselves staring at the person himself. If we reach an understanding of how a person behaves, we discover it in the manner in which he represents his circumstances to himself" (Kelly, 1963, p. 16).

If constructs are representative of behaviours (Wilson & Retsas , 1997), then articulated perceptions of belief appear to underpin conductors' perceptions of expertise, and of the behaviours they associate with it. Implicit within the

pedagogical role of the conductor is the belief that learning is both lifelong and limitless (Sutton, 2006). With this in mind, it is possible to consider the expert as a person, 'at one' with their philosophy. As implied however, belief is nothing without the ability to convey what is 'inside' to those around them. And so the relevance of the conductor as a person is considered as a defining aspect of expert practice.

6.2.2. The Influence of Personality:

Whilst belief may be perceived by conductors to influence their application of the philosophy of CE, the expert's use of their personality is equally powerful. Two conductors (grids 1 & 10) articulate personality as a construct (Table 6.3.), however four others (grids 4,10,12 &17) refer to personality generically during the interview. Personality is perceived by the conductors to influence all relationships. A positive personality is perceived to enable the conductor to connect, and thereby influence learning.

Table 6.3. Bipolar constructs in which personality is included.

Grid No. practice	Personality as Expert and Non-Expert	
Grid 1	Teach whole personality Positive personality	Individual, one aspect Negative atmosphere and learning
Grid 10	Look at others person's personality	Follow the text, not looking at the person

The conductor in grid 1 prioritises her use of personality to convey belief in the learner. She perceives that the expert uses their personality to 'teach the whole person', and recognises that without belief, they 'can't see the whole'. For her personality and expectation are inextricably linked; use of personality is expertise. In a similar way, the conductor in grid 4 articulates that "personality makes learning enjoyable", and construes that the expert uses 'emotional personality to create positivity'. The expert in grid 10 is perceived to have a 'good personality', described as "flexible". The expert is perceived by this conductor to "give advice", and to 'look at the other person's personality'. This enables them to create "mutual respect" and links to the expert's ability to motivate the learner and develop their potential (grid 5). For this conductor, an "open personality" enables an intuitive response in which the expert is able to

"link tasks, activities and aims". Open-mindedness is linked with an ability to "observe" and to "accept others' ideas" (grid 17). This increases the expert's awareness. This is in contrast to the least competent where personality is "closed", and responses remain "blinkered". These perceptions, as with belief, create an understanding of the expert as a blend of both person and professional. The conductor in grid 12 recognises that you "can't completely separate professional from personal". She equates the expert's "good personal skills" with "intelligence", "IQ", "social and team skills". Others perceive the expert to possess "talent and personality" and be able to "put yourself in others' shoes" (grid 17). For these conductors, use of personality impacts application of skills and knowledge in a holistic manner. This appears to have greatest impact on the learner, which in turn positively impacts the conductor, who is able to "see for themselves the improvement" (grid 12).

The construing and articulations of these conductors serve to position personality as a significant factor in expert practice. For these conductors, application of personality within the professional role enables the expert to connect with the learner in a way that positively influences their ability to teach, and to learn from the individual in a self-energising

dynamic. These findings reflect the perception that the expert within person-centred professions is required to blend the professional with the personal (Altmann, 2007; Alvarez & Anderson-Ketchmark, 2011; Dorgo, 2009), and respond to situations holistically (Bauman, 2006), intuitively and aesthetically (Collins & Evans, 2009). In this way, the perception that personality is necessary to convey belief (grid 1) is validated, whilst it is recognised that expertise within CE, as a person-centred profession, does not 'follow the text', and is not mechanical. Whilst these personal aspects of expertise are significant, acquisition of knowledge is also perceived to be essential.

6.2.3. Application of Knowledge:

Conductors describe knowledge as both personal and interpersonal. There is little within their construing or in their articulations that reflects the theoretical knowledge of the expert. Rather the focus appears to be upon the expert's ability to use their personality and their philosophical and psychological perspectives (Kelly, 1963) to achieve success. This influences knowledge acquisition, reflected in conductors' perceptions of the expert who is required to have a 'willingness to learn' (grid 3). In this way experience, personality and application of theoretical knowledge link to

generate an understanding of expertise as personal, and reflective in nature. Seven conductors discuss "knowledge" within the interview itself (grids 4,6,13,16,17,19 &20), whilst eight conductors construe 'knowledge' as a bipolar construct pair (grids 1,3,5,10,11,12,14 & 18) (Table 6.5.).

The constructs reflect conductors' perceptions of knowledge as both professional and personal. Like personality, professional knowledge is perceived to demonstrate the conductor's ability to understand the individual, and to apply their theoretical knowledge to the relationship. The conductor's ability to communicate this knowledge effectively and set expectations impacts their ability to maximise potential. Knowledge is also perceived to relate to the conductor's perception of themselves, and their ability to use 'self-knowledge' in a manner that prevents them becoming arrogant, or bossy. 'Knowledge', as it is construed by these eight conductors is perceived to be theoretical, applicable to the relationship with the learner, and relatable to 'self'.

Table 6.4. Constructs of Knowledge.

Grid No.	Knowledge as Expert and practice	Non-Expert
Grid 1	Communication and teaching	Little knowledge
Grid 3	Knowledge of need	Unwilling to learn
	Self knowledge	Arrogance
Grid 5	Professional knowledge	Lack of knowledge
Grid 10	Good knowledge	Too confident
	How to use Knowledge	Don't know how to use knowledge
	Knowledge	Bossing around
Grid 11	Knowledge of CE	Lack of knowledge
Grid 12	Professional knowledge	Less expert
Grid 14	Know how to use the tools	Not being able to apply the skills
	Know how to get the best out of someone	Not knowing the individual
	Know where the expectations lie	Expecting too little
Grid 18	Appropriate knowledge and how to use it	Not having the knowledge or using it
	Knowing how, what and when to be effective	Lack of knowledge and how to communicate

Theoretical knowledge (know that) and its application in practice (know how) are distinct but relatable concepts, both of which are necessary for the development of expertise (Lum, 2017). Theoretical knowledge is perceived by the

conductors to be “pedagogy and understanding of humanity” (grid 11) and “condition and symptoms” (grid 12). Theoretical knowledge is applied via “communication skills”, observation (grid 17) and an understanding of “people” (grid 14). Communication, required to be “jargon free” (grid 18), impacts the expert’s ability to share their knowledge with the learner (grids 15,17,19&20). For this to happen, the expert needs to be “confident” and “flexible” (grid 12), that is, having the ability to “think outside the box” (grid 14). Confidence is perceived to increase as the expert builds on “previous success” (grid 12). Knowledge and its application, are perceived to link to a belief in the learner’s “potential” (grids 11 & 1). This enables the expert to understand the individual and identify their needs (grids 11,12,14 &18). For these conductors it is essential that the expert “knows” the individual learner with their unique “learning styles, strengths and weaknesses” (grid 11).

The expert is perceived to have “good knowledge” (grid 10), which they use to ‘build on’ and “respond to what they see, immediately” (grid 5). In this way, the expert’s ability to observe influences their “thinking and reflection” (grid 18). Knowledge enables the expert to “know where expectations lie” (grid 11) and ensures that they are set sufficiently high

to impact learning. Whilst no conductors use the word intuitive, the conductor in grid 20 reflects upon the need for knowledge to be sensory. For her this is perceived as a "feeling", and reflects a perception of expertise as intuitive, not just cognitive. This links to, but does not match the perception of Aydelotte (1984); that there is an element of mystery associated with expertise. It does however raise the concept of intuition as an aspect of practice perceived by the conductors to be associated with expertise.

The expert conductor is required to be reflective, to "keep on learning" (grid 11), and to "learn throughout" (grid 6). Reflective knowledge is perceived to equate to 'self knowledge' (grid 3), and an "understanding of what you're good at and what you're not so good at, and how to utilise the team to achieve" (grid 3). This conductor focuses upon individual strengths, and uses them to make the team stronger. The ability to reflect is perceived to be an essential part of expertise, necessary in order to prevent practice from becoming "mechanical" (grid 14), or the conductor from becoming 'arrogant' (grid 3), bossy, with a 'know it all' attitude (grid 11). This personal knowledge is perceived essential for team working (grid 10) in which effective interpersonal relationships enable the expert to "trust" the

team to give it "freedom" to work effectively. Effective team working is therefore perceived to be an essential part of expert knowledge and practice regardless of the conductor's role within the team.

Conductors perceive that experience influences the development of expertise, however knowledge alone is insufficient to make an expert. Whilst belief, personality and knowledge are perceived to be component parts of expertise, application of these in practical skills is also significant.

6.3. Skills:

As this process of synthesis develops, it is evident that belief, personality, knowledge and skills interlink to form a perception of expertise within CE as holistic. Here, the conductors' perceptions of expertise focus primarily upon the skills associated with expert practice, namely facilitation, observation and communication. It is these three skills that are highlighted now. Fifteen of the twenty grids include constructs that relate to facilitation, observation and communication, whilst the remaining four (grids 8, 10, 12, & 16) refer to communication and observation skills during the interview. Leadership is a conductive skill, and included as an element in the grid structure, however, throughout the

analysis, leadership as a construct does not form a significant part of conductors' perceptions of expertise (and only one conductor- grid 6- includes it in her constructs, linking it to communication). The focus in this section is therefore upon the skills that are prioritised by conductors; communication, observation and facilitation.

6.3.1. Communication:

Communication as a construct is present in 13 of the 20 grids (Table 6.5.). Communication skills are perceived to be an essential part of expert practice. Using both verbal and non-verbal communication skills (grids 4, 11, 13 & 20), the expert creates confidence (grid 9), enables the relationship to develop (grid 2) as a 2-way dynamic (grids 2 & 17), and works well as part of the team (grid 17). Expert communication skills, in which both listening (grids 11 & 14) and talking are essential, are also associated with good leadership (grid 6). The expert is perceived as genuine (grid 7), and able to convey their ideas (grid 17), beliefs (grids 2 & 11) and expectations (grid 1) clearly (grid 18).

Table 6.5. Communication as bipolar construct pairs.

Theme	Grid No.	Communication as Expert and practice	Non- Expert
Communication & learning	Grid 1	Communication and teaching	Little knowledge
	Gird 1	Communicate expectation	Not believe in potential
	Grid 3	Effective communication	Unwillingness to learn to communicate
	Grid 9	Enabling	Blocking communication
	Grid 18	Clear communication	Lack of skills
Communication and leadership	Grid 6	Good leader	Poor communicator
	Grid 9	Confidence	Reduce communication
Communication and reflection	Grid 14	Reflect on effectiveness of communication	Speaking not listening
Communication & Relationship	Grid 2	2-way process of observation & communication	Stifling learning
	Grid 2	Communication of trust & belief	Breakdown trust & belief
	Grid 7	Honest & convincing communication	Not listening
	Grid 11	Person knows you believe in them	Unable to communicate belief in person
	Grid 17	2-way process of communication	'don't care' selfish
	Grid 17	Need to be able to communicate well in a	Can't communicate

		team	ideas and plans with success
Non-verbal Communication	Grid 4	N-V comm.	Not responding to N-V cues
	Grid 11	Use of N-V communication	"noisy'
	Grid 13	Good N-V	Tunnel vision
	Grid 20	Use of N-V	Ignoring the N-V

As with the acquisition of knowledge, communication skills are perceived to be skills that can be learnt. The expert is however required to have a desire, not just an ability to learn to communicate well (grid 3). Communication is perceived to be essential for facilitation, teaching (grids 5 & 8, 15) and leadership (grid 12). Social intelligence is perceived to be "more important that IQ" (grid 12), enabling the expert to "adapt to the situation" and to "see what's going on". For this conductor, the priority is the "relationship with the parents", and opportunity to "see for yourself, the improvement". For this to happen, the expert must "put heart in their work", whilst in a holistic manner, application of personality enables the expert to "use their skills", "give good advice" and "bring enjoyment to the group" (grid 10) With respect to this, the expert is required to 'listen', 'help' and 'bring enjoyment' (grid 10). In this way it is possible to consider expert

communication holistically, with impact upon cognitive and emotional learning. Communication as a professional skill is perceived to be a complex mix of knowledge and its application via use of the conductor's personality. This is reflected in grid 16 in which the expert is required to "understand personality", whilst in grid 19, communication is perceived to be an essential factor in the expert's ability to observe and respond to the person as a "whole".

6.3.2. Observation:

Only two conductors (grids 13 & 19) articulate observation as a construct (Table 6.6). Observation is perceived to enable the relationship to develop with subsequent impact upon learning. For these conductors, observation is the key skill of the expert, perceived to impact understanding of the individual at a holistic level.

Table 6.6. Observation as bipolar construct pairs.

Grid No.	Observation as expert and non-expert	
Grid 13	Observation of the group	Not able to see the bigger picture
	Observation	Lack of observation
	Use observation to change	Lack of observation
Grid 19	Good observation	Poor observation
	Good observation	Missing potential (not seeing)
	Good observation of movement	Not paying attention to the detail
	Ability to see the person as a whole	Seeing only one aspect of the person's needs

Other conductors refer to observation within the interviews, and as with the conductors in grids 13 & 19, observation of both the detail and the bigger picture is perceived to be essential (grids 1, 2, 4, 16 & 20). This is articulated as "long sight" not "short sight" (grid 12), whilst the expert is able to plan and have a "future vision" (grid 18). Active observation (grids 16, 20), is linked with non-verbal communication (grid 2), "reflection" and "thinking" (grid 18). In this way observation enables the conductor to respond (grid 10) holistically (grids 4 & 20) and so is perceived to be a central

part of the expert's skill set (grid 5). Like communication, observation is perceived to link with knowledge (grid 10), and if motivated to do so (grid 6), is a skill that conductors can learn. Observation as a professional skill is perceived to influence the expert's ability to respond to the individual in a holistic manner, and links strongly to their facilitation.

6.3.3. Facilitation:

Facilitation as a conductive skill is perceived by the conductors to influence learning by means of the relationship with the learner at an interpersonal level. Table 6.7. itemises the constructs articulated by the four conductors who include facilitation as a construct (grids 2, 5, 14 & 19).

Table 6.7. Facilitation as bipolar construct pairs.

Grid number	Facilitation as Expert and	Non-Expert practice
Grid 2	Facilitate the learning process	Disbelief that learning is possible
Grid 5	Everything about the conductor facilitates learning	Teaching is done in isolation
	Effective with a range of facilitation	Physical facilitation only
Grid 14	Good use of facilitation	Not engaging in relationship
Grid 19	Ability to facilitate problem solving	Not expecting development of orthofunction

Facilitation referred to within 13 interviews, is a conductive skill that enables learning (grid 1), is equated with teaching (grid 3), and is context specific (grid 7). Knowledge of different facilitation techniques and methods; pedagogical, physiological and psychological is perceived to be an essential aspect of expertise (grids 7 & 11). Facilitation itself is associated with knowledge of the individual and the group (grid 17, 18 & 20), is linked to personality (grid 1), pedagogy (grids 1, 10 &11), communication (grids 4, 10,12 &15,16 &17), observation (grid 13) and belief (grid 20). Facilitation, inextricably linked with the skills of observation and

communication, is perceived to be an essential part of expertise, as holistic in nature.

6.4. Expert Practice as Holistic:

The construct pairs generated by the conductors in grids 1, 4, 12, 19 & 20 (Table 6.8) reflect understanding of expertise as holistic in nature. Holism is represented by an ability to understand, teach and observe the person as a whole rather than in fragmented parts. This is articulated in conductors' construing, and in their articulations during the interview.

Table 6.8. Holism as bipolar construct pairs.

Grid No.	Holism as Expert and	Non-Expert practice
Grid 1	Teach whole person	Individual aspect
Grid 1	Personality	Can't see the whole
Grid 4	Look at whole person	Not look at whole person
Grid 12	That makes sense	Not understand the whole
Grid 19	Ability to see the person as a whole	Seeing only one aspect of the person's needs
Grid 20	Seeing the bigger picture	Not seeing the whole

Application of a holistic approach is perceived to impact the expert's ability to convey their belief (grid 1), observe (grids 6 & 7) and facilitate (grid 14) intuitively (grid 7), the whole group, and the individual within it (grid 19). The expert is perceived, as a pedagogue, to "bring everything together to get the best out of the participant" (grid 5) and to 'facilitate learning'. For this to happen however there is a need to be "aware", and to have an "open personality". Not only does this reflect the perception that the expert is able to observe and respond holistically, but that they themselves are holistic. This is best understood in the perceptions of the conductor in grid 19 in which she reflects on her ability to

use the philosophy of CE and apply it to herself. She understands the unique qualities of CE when she says that "...other professions focus on the whole field, in CE we look at wholeness". Whilst holistic practice is perceived to be personal and practice-based level, one conductor, (grid 18) also perceives it at a strategic level. This conductor is unique in her perceptions, however if awareness of the bigger picture is an aspect of expertise (Dreyfus, 2004) further consideration of her perceptions of expertise justify specific consideration.

6.4.1. Holistic Practice as Strategic:

The ability to engage at a cognitive level, and use experience to impact behaviour, is reflected in the perceptions of the conductor in grid 18. She is the most strategic in her thinking and reflection, and articulates a holistic perspective on expert practice. Her constructs and articulations highlight awareness of the ways in which perceived experts use their knowledge holistically. For her, the expert uses their cognition to "think strategically" to "have a future vision", to "use all elements" and to "think ahead". The expert links the "picture together", and has the ability to "learn from experience" generating their "own conclusions", enabling them to "understand consequences and know how to react".

This conductor stands out from the others. She is able to construct a perception of the expert that reflects the intuitive and the cognitive, and is able to apply this understanding to the wider social context. She uses her strategic thinking to ensure that she communicates to service users what she perceives is important about CE. In this way she demonstrates her moral responsibility to the community by prioritizing the aspects of CE she deems important, both philosophically and practically. For her "the belief system is the same, but how you achieve it has changed". She is able to articulate intelligently, demonstrate her ability to link theory to practice, and to base this upon her belief in the pedagogy, which "is the key". She has a "future vision", she "utilizes all elements" and recognizes that all things "are happening together". This conductor's perceptions are similar to that of others however she is also able to uniquely articulate skills that others are not able to do, such as the recognition that CE must be adapted to fit the wider social context. For this reason this grid stands out as a role model for others, and includes aspirational articulations that can justifiably be included in the measurement tool (chapter 7).

6.5. Influences upon Perceptions of Expertise:

The above synthesis of conductors' perceptions of expertise validates the perception of others (Sutton, 2002; Szogeczki, 2017), that CE is a holistic approach to working with individuals with neuromotor disorders. The synthesis of findings, however, takes this further. It is now possible to determine CE as a holistic combination of theory, practice and personality, underpinned by belief. This is reflected in the conductors' ability to make sense of the whole, as they convey their belief in CE through their actions, and so impact others' lives.

With constant reference to the individual interviews and grid analysis, it is possible to position conductors' perceptions of expertise within a wider context. Whilst length of professional experience does not equate to expertise, expert practice is dependent upon it (Dorgo, 2009; Valkeavaara, 1999; Wainwright, Shepard, Harman & Stephens, 2011). What is of relevance here is the way in which experience influences perceptions and the construction of associated meaning (Eraut, 1994; Marble, 2009). With this in mind it is worth considering the experiential factors that may influence the development of practice, and in particular the impact of

experience upon conductors' ability to perceive practice holistically.

The working environment and the interpersonal relationships developed with those within it (March & McPherson, 1996), as well as the conductor's ability to use these experiences, are particularly identified as factors that may impact perceptions of expertise. In particular it is the impact of these experiences upon the conductors' own professional journey (Dumchin, 2010) which holds relevance here. Whilst the work of Eraut (1994) influences my perception of expertise as more than just a process of time and experience, the synthesis of findings indicates that conductors' perceptions of expertise reflect the journey of professional development along a continuum. Exploration of the journey from novice to expert is not an aim of this study, however the synthesis of findings, raises awareness that experience does appear to impact perceptions of expertise. With this in mind, reference to the Dreyfus and Dreyfus (1986) five-staged model of professional development is utilised to position conductors' perceptions of expertise.

The Dreyfus and Dreyfus (1986) five-staged model implicitly assumes a level of aptitude and ability to process information

as the individual gains experience and moves from novice to expert. Implicit within this journey is the ability to consistently utilise experience to develop an ever-increasing perspective of the whole. In the Dreyfus and Dreyfus (1986) model, the novice combines their understanding of the professional theory, and with experience develops a level of expertise (Dumchin, 2010). As experience and level of professional competence increase, the novice develops an ability to apply context-free learning to an ever-increasing number of situations. Learning increases through a recursive process in which skill is replaced by theory. As skill develops, the novice's responses become automatic and intuitive, whilst their perception of the whole changes (Dreyfus & Dreyfus, 1986). They begin to understand the whole in greater complexity and increasingly become a larger part of it (Benner, 1984). Adult learning is dependent upon a combination of both internal and external factors (Dumchin, 2010). In contrast to children, adults appear to learn initially by grasping abstract concepts which they learn to fit together to create a concrete perception of the whole (Dreyfus & Dreyfus, 1986). If the RGT enables the tacit to become explicit (Jankowicz, 2004), then the construct pairs shed light on the conductors' perception of the 'whole' as they increasingly become a part of it. This is summarised in Figure

6.2, with reference to Dreyfus and Dreyfus (1986) and serves to function as a baseline from which to consider conductors' perceptions and the factors that influence them as the synthesis of findings develops.

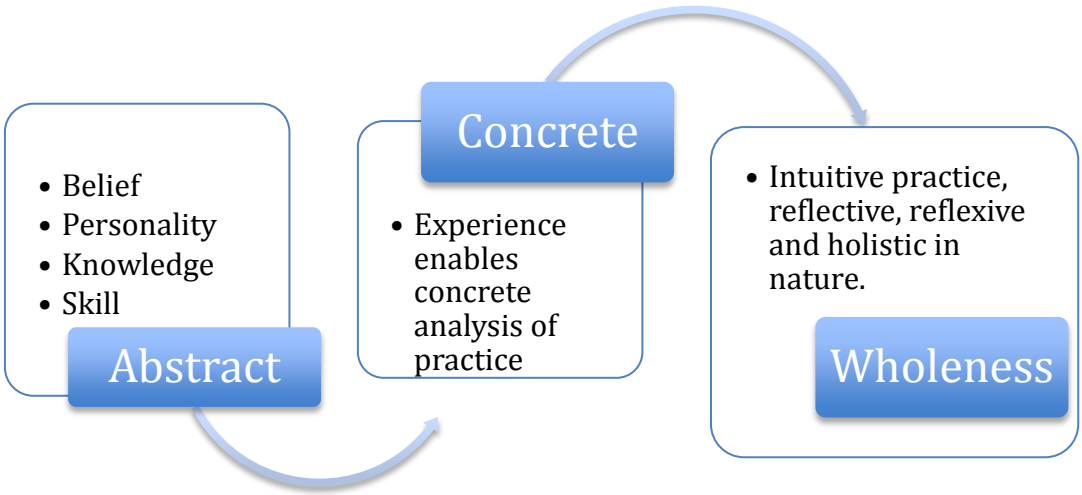


Figure 6.2 Components of expertise and the factors that influence their development.

Awareness of the stages (novice, advanced beginner, competent, proficient, expert) that conductors may experience, transit through, or reside in is relevant, and emerges during the process of synthesis. This knowledge has potential to impact the construction of the measurement tool. If it is clear that expertise requires more than experience alone, then a tool that enables conductors to position themselves against a normative, holistic representation of

expertise has the potential to develop practice, regardless of length of individual experience, or position on the continuum of development. The Institute of Conservation's, Continuing Professional Development plan (2019), is summarised in Table 6.9. Based upon the five-staged model of Dreyfus and Dreyfus (1986) this outline is selected for its focus upon the experts' ability to be visionary and, to see the whole picture. In this way exploration of conductors' perceptions of expertise is enhanced.

Table 6.9.
Summary of the Dreyfus & Dreyfus (1986) model of professional development. (Institute of Conservation, 2019)

Perceived level of experience	Perception of context
Novice	Tends to see actions in isolation
Beginner	Sees actions as a series of steps
Competent	Sees actions at least partly in terms of longer-term goals
Proficient	Sees overall 'picture' and how individual actions fit within it
Expert	Sees overall 'picture' and alternative approaches; vision of what may be possible.

If experience influences perception (Chiari, 2016: Marsden & Littler 2000) then the conductors' perceptions of expertise can reasonably be positioned in the context of, although not defined by, the journey from novice to expert (Benner, 1984; Dreyfus & Dreyfus, 1986; Institute of Conservation, 2019). In my bid to construct a measurement tool, I am careful to use the staged model of development as an adjunct to my comprehension of conductors' perceptions of expertise. I use this as a guideline only to consider the factors that may influence their perceptions, rather than use it to define the level of skill. In this way it may be possible to construct a measurement tool that assists all conductors to utilise their experience. The following section of this chapter considers the ways in which experience influences the conductors' perceptions of expertise. Whilst conductors are positioned in these categories, this has evolved through the iterative process of analysis and synthesis, and serves to support the perception that experience alone does not make an expert. Any distinctions should be read with caution.

6.5.1. The Novice:

With less than one year's experience, the conductor in grid 19 fits into the category of novice, as newly qualified. Whilst her professional experience is limited, as a mature student

she is able to relate her understanding of CE to her own life. She articulates her perceptions of CE, and significantly differentiates other person-centred professions from CE. The former she describes as 'holistic' with a focus upon the "whole", whilst she articulates that in CE we "look at wholeness". This example demonstrates that lack of professional experience alone does not exclude expert insights, however she remains a novice in CE. In this way it is possible to perceive the novice's abstract thinking and disconnect between knowledge and experience (Lum, 2017), however she demonstrates that it is possible to perceive expertise, without the experience, knowledge or competence to personally deliver the skills.

6.5.2. The Beginner:

With two years' professional experience, the conductor in grid 4 is younger, and has less personal experience, than the 'novice'. She appears to put the pieces of CE together in a less abstract manner, and talks about observation and teaching as specific skills. She wants to make learning fun, and to make it individually specific. She talks about the need to observe the whole person, but is more focused upon the application of skills. Within this, however, there is a focus

upon the need for 'emotional', rather than 'physical' safety. By separating out specific tasks and roles, she creates an abstracted perception of practice. For example in response to Q12 states the following; 'use sensory cues-not use sensory cues'. She talks about how she works with people, however there is little sense of 'her' as an individual. She has experience which she draws upon, and articulates a desire to gain perspective on the bigger picture (Q6, 'look at the whole person-not look at the whole person'). She is developing an ability to understand practice and make sense of it, applying what she knows in different situations. In this way she fits the description of beginner.

6.5.3. The Competent Conductor:

With a range of experience from five years to more than 20, the perceptions of four conductors (grids 3,8,16 & 17) describe competent rather than expert practice. In this context, competent creates an image of expertise that reflects a level of skill, and factual knowing (Benner, 1984; Dreyfus & Dreyfus, 1986), albeit with a level of detachment and abstraction (Dreyfus, 2004).

The conductor in grid 3 articulates the need to create a safe environment. This however is without expression of belief, personality or recognition of the sensory needs of the individual. Constructs such as 'effective' and 'competent' are used to convey meaning in a positive manner. This interview is significant in that it highlights a lack of emotion. Whilst this conductor prioritises the need for teaching, and for the child to learn in a secure (physical and emotional) environment, there is no real sense of the interpersonal connection with the child. She articulates that CE has helped her be positive and taught her to "look for the abilities". Her reality of expertise however is concrete, rather than abstract, with construct pairs such as 'teacher learner-close-minded' and 'emotional attachment-inconsistent'. Without emotional expression however she is unable to fully articulate her perceptions in a holistic manner. This fits with a perception of practice that is safe, and whilst it may be holistic and proficient in places (Benner, 1984), does not fit with comprehension of CE practice as flexible and responsive (Demack, 2004). In comparison, the conductor in grid 8 talks about the need to observe the whole person and to be "responsive" to their needs. She recognises how important it is to have a "good general knowledge and bit of extra knowledge of the person". She hesitatingly describes the

conductor as the "person who has certain amount of knowledge of the pedagogy". The pedagogy is described as multi-disciplinary in context; educational, psychological and physiological. Similarly to the conductor in grid 3, she talks about the need for the conductor to be "encouraging" and to be able to "adapt for age and aim of the session". She has awareness of the bigger picture, and of the need for long-term goals (Institute of Conservation, 2019). In this way she is able to prioritise; however, she demonstrates a lack of confidence in her own abilities and knowledge, and construes that there must be a 'willingness' to learn', rather than 'appropriate knowledge-no knowledge or use of it', as articulated by the conductor in grid 18. The perceptions of the conductor in grid 8 reflect a level of experience, and understanding of expertise, however suggest that her understanding of the professional role is limited (Dreyfus & Dreyfus, 1986).

Whilst similar, the conductor in grid 16 considers the expert to be "willing", "effective", and with a "vision that they are able to communicate". She perceives the expert to require good communication skills, to be "able to learn from others" and to be "dynamic". She talks about the need to use "observation to inform practice", and recognises aspects of

the “big picture and the detail”. There is however no real sense of the ‘whole’ or of how she puts all the pieces together. In contrast to grid 3, the conductor in grid 17, does express emotion. She describes the expert as having both the “heart” and the passion. With constructs such as ‘from the heart-selfish’ and ‘comes from inside-don’t have the talent’, this interview, in contrast to grid 3, is initially considered expert. On reflection however, her perceptions of expertise are considered ‘competent’ due to the lack of detail, and over-reliance upon the emotional aspects of expertise. She demonstrates an ability to prioritise, but is unable to position this within the bigger picture. This conductor is consumed with passion, at the expense of a concrete understanding of the role.

These conductors are able to see parts of the bigger picture, but are unable to position themselves within it (Institute of Conservation, 2019), and so are positioned within this level of competence.

6.5.4. The Proficient Conductor:

Ten conductors (grids 1,2,5,7,10,12,13,14,15,20) perceive the expert as able to use their personality to bring about change and learning. They demonstrate comprehension of

the whole, rather than abstract parts (Benner, 1984), and are able to position themselves within it. With more than 20 years' experience each, the conductors in grids 1 and 2 refer to theory, and both prioritise the relationship with the learner. The first conductor articulates the need to use the expert's personality. She considers herself to be a part of the solution and describes the learning dynamic as 'teach whole person-individual aspect'. The conductor in grid 2 also prioritises the relationship, but considers this in relation to the expert's belief in the individual as 'communicate trust and belief-breakdown trust'. Both of these conductors perceive expertise to be within the group setting, and perceive themselves as part of the group. In a similar way, although with less experience, the conductor in grid 5 perceives the conductor role holistically. This is articulated as 'use all information-can't bring parts together' and 'anticipate need-blinkered'. With less professional experience, she similarly perceives herself as part of the group, although her perception of the whole may lack the experience to underpin her perceptions (Lum, 2017).

The conductor in grid 7 is aware of the group and the professional team, and of the need to be able to work effectively within it. She demonstrates a desire to learn and

develop communication skills; 'use verbal and non-verbal communication-not care about communication'. She perceives the expert as someone able to see the "bigger picture, to see things holistically".

The ability to use personality is essential if the conductor in grid 10 is to participate in both the professional team and the group. For him, the expert has confidence, the ability to use knowledge, to think of, and help others. The conductor in grid 12 links theory to practice, and unites the personal with the professional; 'high expectation-care not expect' and 'fair and firm-avoid frustration'. She describes the expert as being able to 'change people's lives-lack of knowledge', and links this with good 'social intelligence'. The conductor in grid 14 perceives the expert as able to 'think outside the box' and reflect on their practice. This conductor looks for ways to improve the relationship with the learner, but is uncertain of how to do this. For the conductor in grid 15, CE is a "lifestyle not a cure". The expert is a teacher and a leader. They are a "certain type of person, constantly able to motivate, to be happy and able to communicate". They need to be "open, honest and realistic" with the "desire and the ability to deliver".

The conductor in grid 13 refers to the "bigger picture", but is unable to see it or know what that might look like. He describes the expert as a good communicator, flexible, knowledgeable and skilful. The ability to observe the individual as a 'whole' is prioritised by the conductor in grid 20, who also talks about the team, the expert's ability to communicate with everyone in it and "keep everything together".

These conductors have similar perceptions. They are experienced practitioners, they believe in what they do and they have experienced success. They perceive the expert as transformative, and want to be a part of that process (Institute of Conservation, 2019). They recognise the need for self-reflection, and also recognise the need for the personal and professional aspects to combine. They do not however perceive the expert in the wider aspects of practice, or see expertise beyond the practice setting.

6.5.5. The Expert:

Four conductors are positioned in this stage (grids 6, 9, 11, 18). The conductor in grid 6 perceives expertise to be "about you". She considers the working environment to have an impact on the development of expertise, and perceives the

expert to be able to "work alone, but not in isolation". In particular she perceives the expert to be willing to "teach and to learn", and to consider lifelong learning essential. This is reflected in her constructs; 'development of professional practice-not recognise need to develop', and 'build on knowledge-lack of knowledge'. The conductor in grid 9 perceives the expert as a role model, an "example to others in how to behave and communicate". She recognises the need to 'do something with joy' in order to prevent 'burnout'. Both these conductors are able to see the whole, the bigger picture, and are clearly a part of it. Communication skills, and the pedagogical role are prioritised by the conductor in grid 11. For her it is important to know the children, and to have a sound knowledge of the pedagogy of CE, and of "humanity". She perceives the expert as using their experience to 'see the potential in the individual', rather than be "ignorant". She ends the interview by reflecting upon Hári's belief in the children and the significance of this for them and their parents. She is able to think outside of the CE box, to reflect upon the pedagogy of CE and its significance to practice.

As identified, the conductor in grid 18 stands out from the others largely because she expresses her awareness of the

need to relate to the social context in which she is working. This is culturally and generationally different from the one in which she trained. Whilst frustrated with these constraints, she is also able to reconcile these factors, expressed in her constructs 'see big picture-focus hands on' and 'ability to adapt-rigid unable to adapt'. She thinks strategically and understands that expertise requires skills, knowledge and an ability to communicate in order to "know how, what and when to be effective". These conductors are able to see the bigger picture, and to consider what the future could look like (Institute of Conservation, 2019), and so are positioned within this stage of expertise.

Reference to the journey from novice to expert reflects conductors' ability to combine the cognitive, emotional, theoretical and practical aspects of practice, as they utilise experience to gain knowledge and understanding of the whole. Whilst these are significant, the interpersonal and environmental experiences that impact the journey towards expertise also play a role, and are now considered. Synthesis of the findings in this way, serve to assist in the construction of the measurement tool. If it is possible to identify perceptions of expertise, against an already defined baseline (Dreyfus & Dreyfus, 1986), then it may be possible to

construct a tool that in some way can utilise these experiences and perceptions to assist conductors reflect upon their practice and their goals.

6.5.6. The Impact of Others:

Without experience, development of professional knowledge and expertise is restricted. Whilst Personal Construct Psychology may make little reference to the impact social influence has upon construing (Marsden & Littler, 2000), experience gained within the workplace, because of its social and collaborative context (Patel, Glaser & Arocha, 2000), has potential to impact perceptions. The learning environment creates potential to influence the way in which conductors learn, apply their knowledge, and develop confidence in a personal, informal manner. The workplace is seen as significant in the development of tacit or personal knowledge (Eraut, 2004). In this study, thirteen conductors are employed across two CE centres. Five interviews take place with conductors from one, whilst the remaining eight work together in another. In the first of these centres, there is one goal; to provide services to children and adults with motor learning disorders, whilst in the second centre, service provision is only one aspect of the organisations' remit. Reflection on the five interviews with conductors from the

first centre (grids 6,7,8,9 & 18), raises awareness of the articulation of a common ethos. This is demonstrated in the conductors' articulation of the whole, with particular reference to perceptions of expertise relative to the group and the team. This is reflected in their perception of both verbal and non-verbal communication skills. There is a certain passion in these interviews to be the 'best', to have aspiration, but in a manner that achieves without challenge or conflict. When the five interviews are considered as a whole, it is possible to feel that the ethos of the centre lives through these conductors. This is observed in their positivity, expressed desire to learn and to enable learning. This is particularly noticeable in the construing and articulation of the lead conductor (grid 9). As the leader of the team she considers herself to be a role model, with particular impact upon the need for practice to be fun. Her perceptions of expertise live through her team, and in this way she is considered a role model (Burgess, Oates & Goulston, 2015). Within this team, there is also room for individual difference. This is particularly noticeable in grid 18 in which the conductor demonstrates a unique quality to her construing. Within the ethos of the organisation, she fits in, however there are characteristics that make her unique. In particular these relate to her ability to see the bigger, strategic picture.

This centre, with a single goal, and a leader who perceives herself to be a role model, appears to impact the perceptions of those who work with her. Whilst this cannot be validated, the perceptions of these conductors contrast to those in the second centre. In comparison, the other CE centre where the majority of interviews take place (grids 1,2,3,4,12,15,19&20) does not reflect a shared ethos. Conductors work together, however whilst they talk about the group, the participants and parents, there is little reference to the team as a positive influence, or of the influence of role models within it.

One factor that appears to influence professional development is the presence of a role model who is capable of mentoring and giving feedback on practice and professional behaviour (Wainwright, Shepard, Harman & Stephens, 2011). With an ability to convey aspects of themselves, their values and their beliefs, rather than specific skills or knowledge (Wright & Carrese, 2002), the role model is perceived to support comprehension of the whole, not just its parts (Lyon, 2015). Role models and role modelling are therefore considered significant in understanding the factors that may influence conductors' perceptions of expertise.

At the beginning of each of the RGT interviews, when eliciting constructs from the elements, conductors are asked to think of specific individuals (Edwards, 1998). In reality only four of the 20 conductors (grids 1,9,11&13) are able to do this. Three of the four conductors are Hungarian, and they talk fondly and emotionally of the positive impact their mentors have had upon their early professional development. In particular this relates to their ability to develop their personality within the group (grid 1), and develop effective communication skills (grid 11). The conductor in grid 13 talks about non-verbal communication skills and describes his role model as enabling the group to "look like magic". The need to have role models, and to be perceived to be a role model for others, appears to hold significance for these four conductors. The fact however that so few conductors are able to identify with specific individuals raises questions for discussion (chapter 8).

With consideration of the impact life experience can have, this synthesis suggests that professional expertise is associated with conductors' ability to use their personality and beliefs to drive their learning forwards. The ability to unite the personal with the professional as a characteristic of the expert (Hardy, Titchen, Manley & McCormack, 2006),

supports the perception that learning as a continuous process (Daughhetee, Puleo & Thrower, 2010) is essential for expertise to develop.

Experience alone does not make an expert (Eraut, 1993), and the synthesis of findings above supports this perception. Whilst belief is perceived to be an underpinning aspect of expertise as holistic, the conductors interviewed are no less protected from developing automated, mechanical practice than those in any other person-centred profession. This is significant, and serves to influence the development of the measurement tool, with a view to facilitating the use of reflective practice as a means by which to reduce the impact of automated, disconnected practice (Eraut, 2005).

6.6. Synthesis of my Learning:

A reflexive awareness of the impact my belief system has upon this process of synthesis is important. As a nurse, practising within the medical model of health, I did not believe that change was possible. In order to continue my own professional journey as a conductor, however, I have had to challenge my own beliefs, and perceptions of human ability, in particular related to those with neuromotor disorders. I position belief in CE and in the learner as the

fundamental, underpinning category upon which all others rest. Whilst I consider this to be representative of the facts, I also recognise that this reflects my own perspective. This is perhaps best demonstrated by my response to the third interview. The aim of the RGT is to determine the tacit, the meanings attached to behaviour, and has the potential to elicit feelings and emotions (White, 1996). What I neglect to consider is the potential of and for emotional expression during the interviews themselves. This is an oversight, and reflects the challenges of the insider-researcher to be objective (Eraut, 1993). When reflecting upon interview 3, it is the emotion that I perceive to be missing. I describe this as a 'soulless' interview. Learning from this interview however, enables me to objectify the emotion expressed in grid 17, and holds relevance in grid 18 where the conductor talks personally but objectively about practice at a strategic level. With respect to the impact of the working environment, I find the lack of reference to role models as both surprising and concerning. Whilst I may not absorb all of their characteristics into my own practice, I know there are specific individuals I respect, who demonstrate the transformative power of the conductor role. Similarly, I had not anticipated that the conductors' perceptions would reflect a journey from novice to expert (Benner, 1984; Dreyfus and

Dreyfus, 1986; Institute of Conservation, 2019), or that so consistently perceptions would be reflected across interviews. Reflection on the impact of practice upon perception is significant. If I believe that change is possible (Feuerstein, 2008) then awareness of development as a fluid journey rather than a staged process must be reflected in the construction of the measurement tool.

6.7. Conclusion:

Conductive Education, as a complex, holistic, experiential system of education and rehabilitation, aims to address all the needs of the individual, regardless of age, (Hári,1990; Kozma,1995; Ratliffe & Sanekane, 2009; Waiss & Borcsok, 2007) with particular focus upon development of personality (Hári & Ákos, 1988). The perceptions of the 20 conductors interviewed suggests that the conductor must also apply this holistic approach to themselves. This is demonstrated in their perception of expertise as a complex and integrated process of continuing professional development in which the personal, professional, theoretical and practical unite. The journey from novice to expert is influenced by personal and environmental factors, such as the presence and influence of role models within the working environment, the conductor's

role within the team, and their ability to feel a part of it (Eraut, 2007).

Within a health care setting perceptions of expertise relate to empirical knowledge, supportive team building, assertive leadership and patient focus intervention (Edwards, 1998, 1997). Knowledge, skills, personal attributes and ability to reflect are also considered key areas for development (Lyon, 2015). The final destination on the path towards that of expert may not be a static point (Dall'Alba & Sandberg, 2006), it is however one in which the conductor becomes orthofunctional, as they apply their skills, knowledge and belief system in a holistic manner to others, and themselves. This is positioned against Pető's perception that life for the child is a unification of the body and mind in harmony (Maguire & Sutton, 2012). With this in mind, it is then possible to define expertise as unification of practice, in which the conductor as a unified whole, practises in a holistic manner, within an inclusive environment. The synthesis of individual conductors' perceptions of expertise, reflect the need for CE as a person-centred profession to consider its 'moral obligation' (Eraut, 1993) to those who access its services. It is therefore relevant to identify aspects of practice that conductors perceive to be expert, and

experiences that impact the construction of these perceptions (Edwards, 1998). It is also relevant to consider the ways in which conductors recognise and are able to personify learning within the professional context (Dall'Alba & Sandberg, 2006).

The process of synthesis within the context of this study supports the construction of a framework from which to guide practice towards that of the perceived expert. If synthesis is invention, rather than discovery (Kelly, 1958), then this synthesis enables the generation of an understanding of expertise within CE as a holistic combination of belief, personality, knowledge, skill (Figure 6.3). This synthesis, developed from the interviews with 20 conductors (chapter 5), serves to underpin the development of the professional measurement tool discussed in the following chapter.

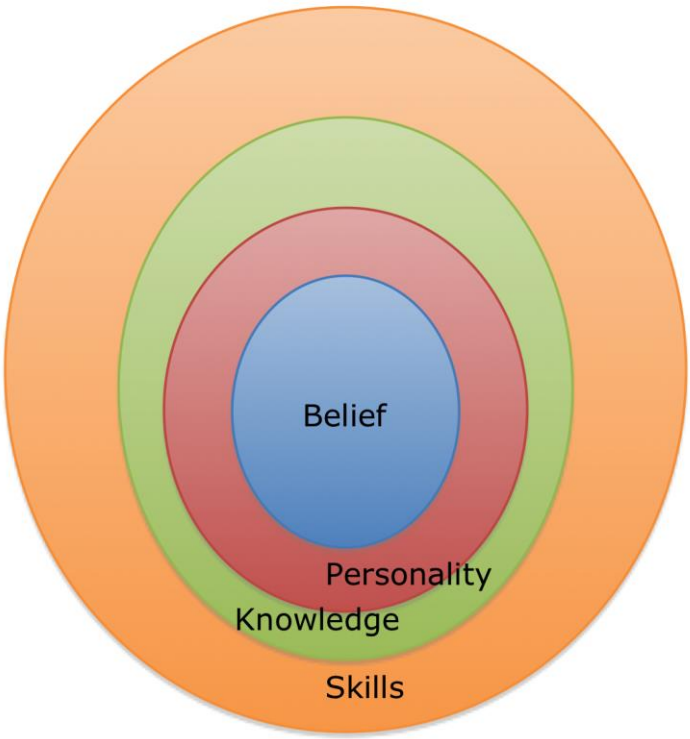


Figure 6.3 Synthesis of findings and conductors' construed perceptions of expertise.

7. CREATING A MEASURE:

"One of the tenets of holism is that the whole is greater than the sum of the parts" (Haynes, 2009).

7.1. Introduction:

Professional development described as a fluid process, dependent upon knowledge, experience and analysis (Lyneham, Parkinson & Denholm, 2009) reflects the findings of this study. With particular consideration of conductors' perceptions of expertise as a "*whole-istic"* (Szogeczki, 2017, p. 6) combination of knowledge, skills, personality and belief, it is essential to develop a professional measurement tool that reflects both the idiographic and nomothetic data. The aim of the tool is therefore to create a measure of expertise as a 'whole', bigger than the sum of its parts.

7.2. Purpose of the Tool:

This chapter outlines the rationale behind the construction of the measurement tool, developed from the data collated and synthesised in chapters 5 and 6. The group of conductors participating in this study is small, however they are a diverse group, and as such can be considered representative of conductors working in the UK in the 21st century (CE-only

centres, multi-professional settings within the statutory educational system, charities, and those working independently (PCA, 2019). My aim for this study is to construct a tool that is relatable and relevant to all who work in the UK. With this in mind, I aim to stay 'true' to the original data, whilst maintaining a pragmatic, conscious and reflective awareness of the impact of my role as an insider-researcher (Law, Ireland & Hussain, 2007).

At an individual level, Benner (1984) recognises the need for a baseline awareness of the present reality, from which development towards a goal is possible; "not knowing who and what we are about *now* will seriously impede what we want to become" (Benner, 1984, p. xxi). The ability to set goals and aspire to them is in itself, an aspect of expert practice (Eraut, 2005). In the context of this study, if it is possible to construct a measure of expertise against which conductors can define both their starting position, and their goal, it may be possible, to impact practice, and assist conductors develop resilience and their own orthofunctionality. Seligman (2000) reflects upon his own daughter's need for strengths-based development in order to become resilient. So too for the conductor working in the UK (Maguire & Sutton, 200; Van der Aa, Van den Broeke,

Stronks, Busschers & Plochg, 2016). If the findings and synthesis of this study are to impact the measure, then consideration of the factors that serve to increase resilience, at both idiographic and nomothetic levels holds relevance. In keeping with the underpinning principle that potential, rather than deficit, is the conductors' focus (Szogeczki, 2017), it is essential to construct a tool that facilitates a positive process of learning and development. Orthofunction, the ultimate aim of CE (glossary) likened to what Martin Seligman (2000, p. 6) articulates as "seeing into the soul", is a state of unification in which body, mind and spirit align. The measurement tool must have potential to develop strengths, and in a holistic manner, unify 'body, mind and spirit'. At the nomothetic level, the tool aims to set the direction for development of the profession as a whole. In this way, conductors can be positively facilitated to develop towards a common perspective of expertise, rather than measure themselves against the performance of others (Gilbert, Nater, Siwik & Gallimore, 2010).

7.3. Which tool to choose?

CE, as a unique approach to working with individuals with neuromotor difficulties, is positioned similarly with other person-centred professions in health and education (Lyon,

2015). Within clinical settings, core competencies are used to guide the development and application of existing skills and knowledge to new and related contexts (Gilbert & Womack, 2012). Whilst relevant, this approach may not lead to the construction of a measure of expertise. Peer review as a respected means of professional development (Rourke, 2013; Murphy, Hughes & Sullivan, 2013; Tee & Ahmed, 2014) can enhance communication and team working (Garbett, Hardy, Manley, Titchen & McCormack, 2007). Whilst feedback is considered a valuable element in the learning process (Tee & Ahmed, 2014), many conductors work independently, or alone. For these reasons, a systematic process of feedback involving others is discounted.

Personal Construct Theory (PCT) sits within a pragmatist paradigm, in which the theory becomes useful as it influences practical application (Burr, King & Butt, 2014; Chiari, 2016). The concept of self-efficacy in which expectation is linked to both action and outcome (Law, Ireland & Hussain, 2007), also sits with the pragmatic aims of positive psychology, and facilitates construction of a tool with both idiographic and nomothetic relevance.

Positive psychology, whilst not in itself new (Seligman & Csikszentmihalyi, 2000; Gray, 2011), is perceived to be a "new" psychology (Mayerson, 2018), aiming to facilitate the development of human potential to the highest level possible (Peterson & Seligman, 2004). With a focus upon improving the quality of life, of both the individual and the larger community (Law, Ireland & Hussain, 2007), a positive psychology approach is perceived to create opportunity for the development of a new way of thinking. Within a work context this has potential to develop professional competence (Seligman & Csikszentimahlyi, 2000). Solution-focused approaches prioritise the creation of opportunity and the development of strengths, over problems, implicit within a deficit-, or pathology-based perspective (Gray, 2011; Seligman & Csikszentmihalyi, 2000; Law, Ireland & Hussain, 2007). Csikszentmihalyi, whose work on Flow Theory is implicit within positive psychology, also influences CE practice (Grundtvig, 2012). With its focus upon healing by means of prioritising the strengths, rather than the weaknesses (Seligman & Csikszentmihalyi, 2000), positive psychology fits with the underpinning theories of CE, and provides a means by which the professional development tool fits with the aims of the profession itself.

If psychology is about "…work, education, insight, love, growth and play", (Seligman & Csikszentimhalyi, 2000, p. 7) then the aims of this study, and of CE, fit within this academic sphere.

At this point in this study, it is possible to come full circle, and consider the development of the conductor as a whole, with reference to a holistic framework in which the praxis of CE is lived out in the individuals delivering it. Within the theoretical context, this holistic approach moves CE into the 21st century. In this way it is possible to maintain CE's reputation to stay "ahead of its time" (Hári, 1988, p. 1; Kozma, 1995; Hári, 2001), and perpetuate Petö's belief that both man and CE are complex, and required to be constantly in dynamic interaction (Grundtvig, 2012).

With a focus upon strengths rather than dysfunctions (Hefferon & Boniwell, 2011) the Values in Action (VIA) questionnaire developed with a positive psychology outlook, is a self-reflective, self-assessment tool (Peterson & Seligman, 2004). Given the range of professional situations in which conductors are employed, a self-reflective measurement tool is considered an advantage. A pragmatist conclusion to this study, where knowing as a dynamic

process of interaction (Corbin & Straus, 2008), imagination and novelty (Elkjaer, 2009), provides the opportunity to maximise conductors' perceptions of expertise in a manner that fits both the constructivist basis of this study, and the theoretical underpinnings of CE, is considered ideal. In this way it may be possible to increase professional confidence and fulfil conductors' 'moral obligation' (Eraut, 1993) to deliver expert practice.

In a similar way to that in which the teacher is required to understand the learner's motivations and goals (Miller, 2010), this study is led by the perceptions and meaning making of the conductors themselves. By staying close to the data throughout, this study continues to provide energy, and influence its own direction. The inductive journey of tool development, from initial exploration to final end point, is described "…as an oscillation between movements of analysis and integration in which, on balance integration predominates" (Polanyi, 1969, p. 130). As a result, the data, analysed from both quantitative and qualitative perspectives, is finally united in a tool that represents idiographic, nomothetic, professional and personal perceptions of expertise. By explicitly linking professional development with the profession's own theoretical underpinning, this study is

unique amongst other studies of expertise. As a self-reflection measurement tool, there is opportunity for the conductor to be solution-focused. By basing the tool within this positive paradigm it is possible to bring this study to a holistic conclusion. The remaining sections of this chapter demonstrate how individual perceptions of expertise have the potential to impact professional development with both idiographic and nomothetic relevance.

7.4. Item Generation and Questionnaire Construction

7.4.1. Construction of the measure.

The VIA, Strengths and Virtues Questionnaire (Peterson & Seligman, 2004) consists of six core virtues (humanity, justice, wisdom, courage, temperance, transcendence) and 24 strengths (Figure 7.1). Virtues are historically perceived as part of the whole; interconnected in the sense that if one virtue is absent, the others are also altered (Niemiec, 2018). Similarly, character strengths also exist in combination. The virtues and strengths are constructed in a way that reinforces their inter-relatedness.

As a structure for a measurement tool, this format has potential for conductors to perceive the impact of their actions upon the whole, rather than the isolated parts of their practice. With this in mind I address both idiographic, and nomothetic characteristics and behaviours generated from analysis and synthesis of data (chapters 5 and 6).

The wording of the 'virtues' remains consistent with those of the VIA questionnaire, however the strengths are adapted to reflect the conductors' perceptions of expertise, (appendices 1.3.1 and 2.1.1). These strengths are representative of all 20 interviews and reflect conductors' perceptions of expertise as a holistic combination of belief, personality, knowledge and skills. With this focus, Figure 7.1. links themes from phase one (belief, personality, knowledge, skills), to the character strengths and virtues. The following outlines this process of development. Construction of the measurement tool signifies the completion of phase one, and the beginning of phases two and three.

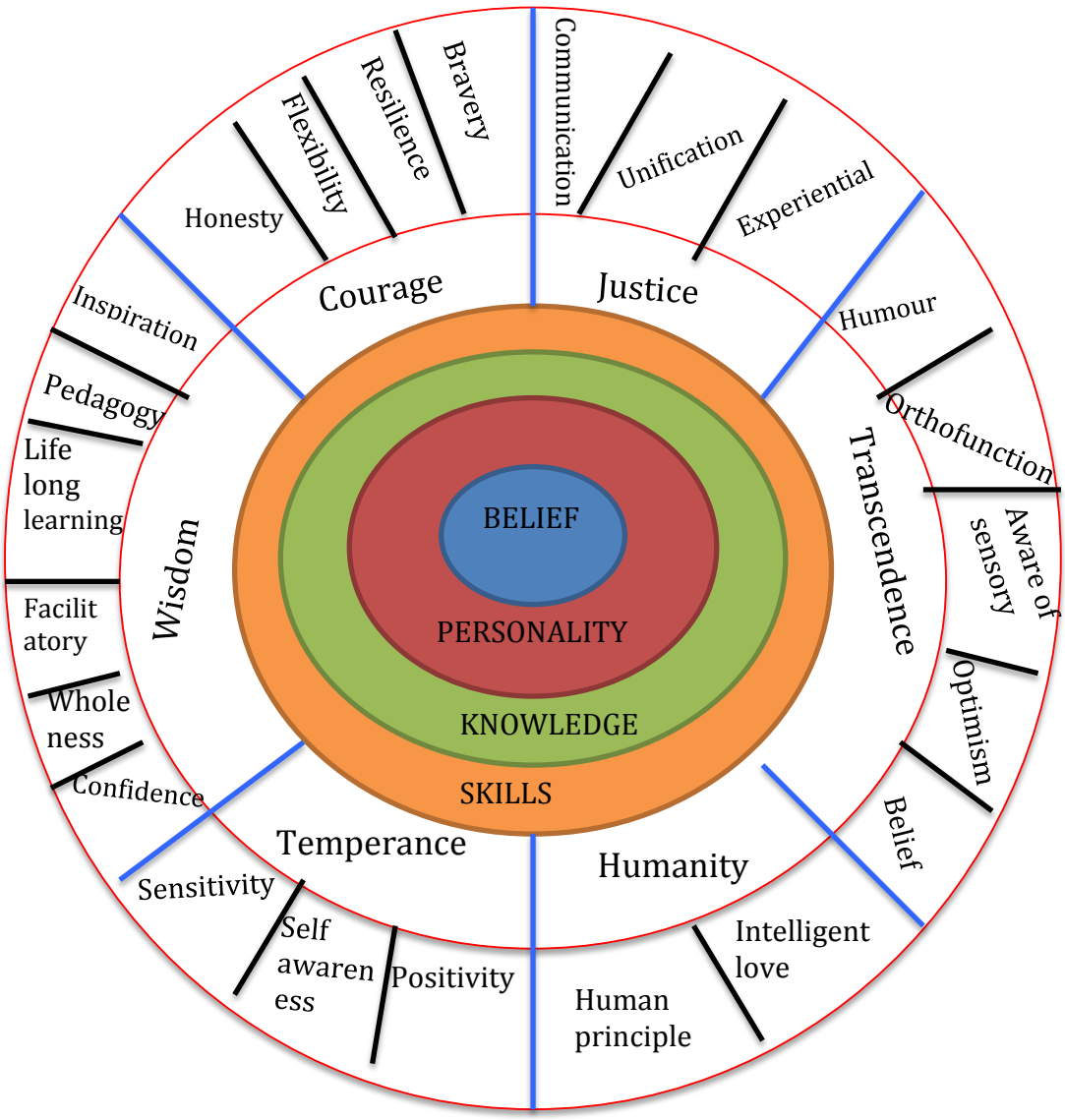


Figure 7.1. Category headings from idiographic data from phase one.

(underpin the Character Strengths and Virtues adapted (from VIA Character Strengths and Virtues, Peterson and Seligman, 2004) to fit the CE context) .

7.4.2. Process of Adaptation:

Whilst the wording of the virtues remains unchanged, the strengths associated with them are adapted to fit the context of conductors working within the UK. With reference to Peterson and Selegman (2004), and the analysis and synthesis of findings, 23, rather than the 24 strengths stated in the VIA questionnaire are identified to fit the CE context.

7.4.3. Item Construction:

With reference to Polanyi's suggestion (1969) that inductive discovery is dependent upon an ability to oscillate, and Butt's (2004) assertion that construing "is internally related to feeling and action" (Butt, 2004, p. 26), I return again to each interview and reflect upon the constructs and interview statements. Items for inclusion within the questionnaire are derived from the individual grid data. I ensure that I re-read each of the construct pairs in the context of the reworded CE-specific strengths (appendix 2.1.1). Items are selected for their ability to represent the strengths and virtues, and worded as statements. Care is taken to ensure that only one concept is included in each item. With reference to the bipolar nature of the data collected, items represent perceptions of the expert and of the least competent. For example 'I never let personal differences impact my decision making' (Q65) (expert), and Q67; 'I find it hard to think of

what the individual needs, not just what they want' (least competent). This is also demonstrated in example in appendix 2.1.2.

The items are selected in the knowledge that expertise requires encouragement and support to develop (Bereiter & Scardamalia, 1993). For example, 'I never shy away from difficult situations', and 'I am too afraid of failing to take a risk' are selected for their potential to challenge, rather than 'I have the knowledge and the confidence to justify my actions' and 'I always see the positives in a situation' which encourage affirmation (the implication of these choices is discussed in chapter 8.6.3). To validate item selection, and reduce researcher bias, items included within the questionnaire are mapped against each grid (appendix 2.1.8). All grids are represented in the questionnaire, and all questions relate back to the grids.

Based upon the above principle of challenge, and representation of the nomothetic, and the idiographic, the process of 'oscillation' continues until four items are selected for each of the 23 strengths. This generates 92 items for consideration. In this way it is possible to utilise the bipolar nature of the data collected, and create a holistic perception

of expertise as articulated by the 20 conductors. The items are then randomly distributed throughout the questionnaire. This process of item selection and validation continues into phase three until the final version of the questionnaire is agreed and the selection of 92 items confirmed (appendix 2.3.3).

7.4.4. The Questionnaire as a Measure of Perception:

The questionnaire aims to represents conductors' perceptions of expertise. With Benner (1984) in mind, as a self-reflective measurement tool, it has potential to measure a baseline of individual perception of expertise from which the conductor can then construct a plan for further development. Following item generation and the construction of the questionnaire, it is necessary to determine its content validity. As a first step in this process the questionnaire is evaluated for its comprehensibility and relevance; this is the purpose of phase two.

7.4.5. Ethics:

Ethics approval is granted from The University of Wolverhampton (appendix 2.2.1) to undertake this process of validation in two phases.

7.4.5.1. Procedure:

Three centre managers are approached for the first of these phases (appendix 2.3.1). All managers reply, although the return rate is low. In total, from the twenty questionnaires sent, nine are completed and returned (six questionnaires from seven distributed in one organisation, one from another CE centre, and two from a third). There is no reason given for this, except that it is towards the end of term, when staff fatigue is perhaps higher than at other times in the term.

7.4.6. Feedback:

Conductors are requested to complete the questionnaire and to give feedback on its ease of completion, perceived relevance and utility (appendix 2.2.2 & 2.2.3). Returned questionnaires and feedback forms (appendix 2.2.4) indicate that there are concerns regarding the format of the questions, whilst the questions themselves are perceived to be meaningful and relevant. In spite of this, three questions raise issues. For example Q.16; 'some people describe me as

bossy' is perceived problematic as conductors are concerned about what their peers think of them, rather than how they think they might be perceived by others. In this example, the question is reworded to 'my peers would describe me as bossy'. Changes are made to these three questions and a further three questions are added at the end of the questionnaire, with a view to increase context specificity (appendix 2.3.3).

7.5. Method: Phase Three:

7.5.1. Overview:

This final phase consists of two stages. The first of these stages requires conductors to complete the questionnaire and return it for analysis. The second stage involves a process of member checking to determine if the virtues that underpin the questionnaire are perceived to have relevance to conductors working in the UK (appendices 2.1.7 & 2.3.6).

7.5.2. Phase Three, Stage One:

The aim of this stage is to confirm content validity, and to determine if items can be reduced with a view to making the tool shorter and more focused. I approach the centre managers of six CE centres to participate in this final phase

(appendix 2.3.1. & 2.3.2). Twenty questionnaires are sent out, eighteen are completed and returned anonymously.

7.5.2.1. Positioning the Context of the Answers:

Following feedback from phase two, three questions are added at the end of the questionnaire. The aim of these questions is to determine the context of conductors' perception. They form a continuous extension of the questionnaire. Unfortunately, however, these questions are either left blank, or incorrectly completed, and so these answers are discounted. Four of the eighteen conductors give feedback on the relevance of the questionnaire. This is summarised in table 7.3

Table 7.3. Summary of comments from phase three, stage one.

CE only / Multi-professional	Context	Personal relevance
CE only	Relevant to the professional context. Wants to know implication for herself.	Raise issues surrounding who they think they are, and who they want to be. The questionnaire makes her think about what she could do differently.
Multi-professional	Questions trigger emotions e.g. feel that they as conductors are perceived as bossy, this is a consequence of the passion they feel, sometimes feel misunderstood.	Emotional responses are also expressed in response to questions 21, 23, 28, 32, 34, 42, 48, 65, 79
Multi-professional team	Qs 66, 82, 86 raise consciousness of isolation in the organisation	
Newly qualified	Uncertain of some questions due to lack of experience	

The feedback from these conductors serves to highlight the need for such a measure, and of the emotional aspects of the role, associated with team-work, or where conductors feel isolated.

7.5.2.2. Analysis of Phase Three Questionnaire:

Following return of the 18 questionnaires, data is inserted into SPSS. Principal Axis Factoring, with Monte Carlo simulation, was undertaken, as a standard process of psychometric testing of new measures. Due to the small sample size, however, the number of factors arising equals

the number of participants, therefore it is not meaningful to consider this process of analysis. On reflection, as the items in the questionnaire are empirically derived through robust consultation with conductors as the target group, rather than from theory, or my own experience, statistical reduction methods are perceived to undermine this robust process of construction. The inability to conduct the psychometric testing is therefore of less concern. As an alternative response to the statistical means of item reduction, I request further participation from conductors. I undertake a process of member checking to determine if the descriptors of the strengths and virtues are relatable, and relevant (appendix 2.1.7). I request that conductors also prioritise the virtues, with 1 = most important, 5 = least important. Whilst involving participants in a member checking process may influence the analysis (Mulhall, 2002), their involvement is also understood to increase trustworthiness (Mercer, 2007). Member checking as a means by which credibility is strengthened (Kemp, 2012) is the motivation behind the request for conductor feedback and involvement. I request and receive feedback from eight conductors. Consensus confirms the descriptors to be both relevant and relatable. All conductors are able to prioritise the virtues.

7.5.3. Utility of the Tool:

As all the questionnaires in phase three, stage two are returned anonymously, it is not possible to validate their scores with each conductor or discuss the implications with them. To provide an illustrative example, however, the data from one of these questionnaires is plotted in Figure 7.3 below. The individual scoring (see appendix 2.3.4) is summarised in Table 7.5 and plotted in the spider diagram Figure 7.3 below.

Table 7.5 Average score for each Virtue, with corresponding lowest scoring strength

Virtue	Score	Strength
Wisdom	1.7	Pedagogy and Facilitatory
Transcendence	1.95	Belief and optimism
Humanity	2.12	Human Principle
Courage	2.25	Flexibility
Justice	2.41	Communicative and Unifying
Temperance	2.66	Sensitivity

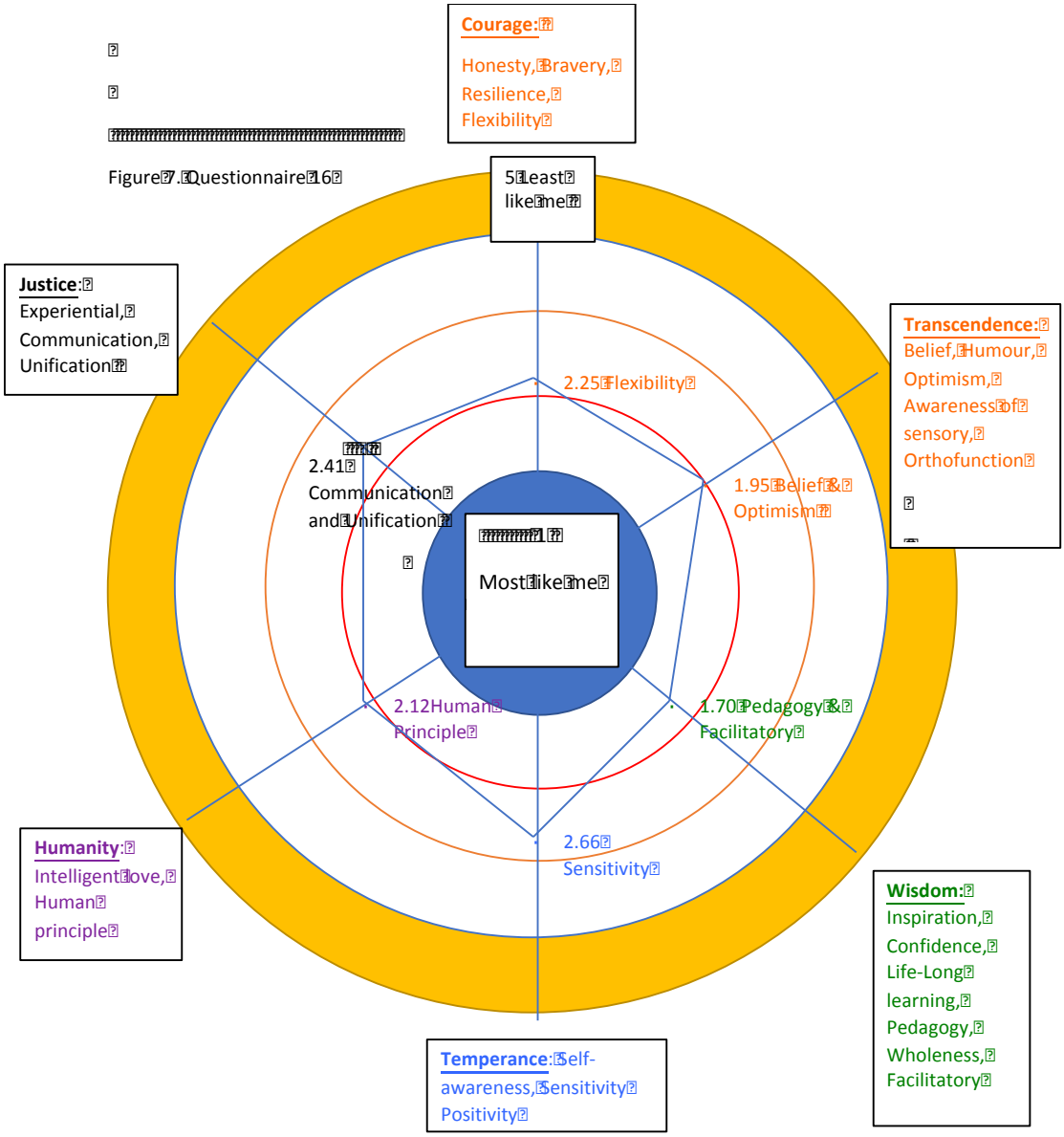


Figure 7.3 Questionnaire 16

Figure 7.3

7.5.4. Conclusion:

Further exploratory investigation is required to evaluate the utility of the questionnaire as a tool, however feedback from conductors suggests it is both relevant and relatable.

Feedback suggests conductors are interested in using the tool, and are happy to use it to reflect upon practice. Conductors appear to value the line of questioning, and enjoy the challenge of having to prioritise the virtues. Visual representation of the scores (Figure 7.3) creates a baseline from which a process of goal setting and reflection can begin. The implication of these findings is now discussed in the context of conductors' perceptions of expertise and the factors that influence them.

8: CONCLUSION AND DISCUSSION:

….we are all forms of motion. It is where we are going to move to which is the intriguing question

Fransella (2005, p. xvi).

8.1. Summary of findings and conclusions:

I begin this study by describing Conductive Education (CE), as a psycho-pedagogic approach to working with individuals with neuromotor disorders (Sutton, 2002). At the conclusion of this investigation into conductors' perceptions of expertise, I return to Sutton's definition as a means of contextualising what is learnt.

Within this thesis, Personal Construct Theory (Kelly, 1963) is the underpinning theory positioned within a constructivist, interpretivist paradigm. Application of this theory via Repertory Grid Technique (RGT) (Fransella, Bell & Bannister, 2004; Jankowicz, 2004) enables exploration of conductors' perceptions of expertise. Twenty conductors based in the UK are interviewed using RGT, as a mixed-methods approach to data collection (Klapper, 2016; Smith, Hartley & Stewart, 1978;). This facilitates the use of a mixed-methods approach to data analysis, via Principal Component Analysis (PCA) and

Constructivist Grounded Theory (CGT) (Charmaz ,2006; 2017). Application of these methods of collection and analysis, creates an understanding of perceptions of expertise with both idiographic and nomothetic relevance. Whilst individual conductors' perceptions are unique, common themes emerge as the process of analysis supports the development of a narrative comprehension of conductors' experiences (King, et al., 2014).

The findings of this study suggest that conductors perceive expert practice to be holistic in nature. Underpinned by their belief in CE as a transformative pedagogy, the conductors perceive expert practice to be a holistic application of belief, personality, knowledge and skills. As such, expert practice is perceived to reflect a combination of personal and professional experiences, attitudes and motivations. Whilst the expert is required to be self-motivated, the working environment, and in particular the presence of role models is perceived to influence the development of expertise. Expert practice is perceived by the conductors to extend to situations beyond the immediate group situation, to include interpersonal connections within the professional team.
The initial findings of this study underpin the construction of the self-reflective measurement tool. This tool, whilst not a

validated measure of expertise, has potential to assist professional development at both idiographic and nomothetic levels.

The work of Csikszentmihalyi, in the context of positive psychology (Hefferon & Boniwell, 2011), influences practice within Conductive Education (Grundtivig, 2010). Application of a pragmatic, positive strengths-based approach from which to utilise the conductors' perceptions of expertise is therefore considered both relevant and appropriate. Adaptation of the Character Strengths and Virtues Questionnaire (Peterson & Seligman, 2004), as an application of positive psychology (Niemiec, 2018), is utilised in the construction of the self-reflective measurement tool.

This concluding chapter summarises the journey of this thesis; the achievements, the limitations, the implication of findings within the professional context, and upon myself as the insider-researcher. Each research question is visited in turn.

8.2. How Conductors Construct their Perceptions of Professional Expertise

In light of the individual grid analysis (chapter 5), the synthesis of grid findings (chapter 6) and the construction of the self-reflective measurement tool (chapter 7), the ways in which conductors perceive expertise are revisited. Kelly's theory (1963) of personal construing (Mischel, 1980), as a blend of cognition, conation and action, creates opportunity to gain an understanding of the individual in a holistic manner in which the intuitive, verbal and conceptual are combined (Marsden & Littler, 2000). The application of Kelly's theory in the form of the Repertory Grid Technique (RGT) creates an opportunity to gain insight into the individual's mental map (Clayson, 2013; Kuipers & Grice, 2009a; Raskin, 2002). As such, application of the RGT enables the tacit to become explicit (Kelly, 1963), allowing the personal and professional factors that influence conductors' perceptions of expertise to become identifiable (Herbig, Bussing, Ewert, 2001). Bipolar construct pairs, generated from the RGT, create a multidimensional image (Fransella, Bell & Bannister, 2004) that reflects the conductor's perceptions of expertise and the factors that influence them. If "perception is *the* input to cognition" (Cahen & Tacca, 2013, p. 144), then the factors that

influence conductors' perceptions can be considered as representative of their cognitive processing, and so are worthy of consideration.

8.2.1. The Journey of Knowledge Acquisition:

Knowledge is perceived by the conductors to be both 'professional' and specific to CE. The conductors perceive knowledge to be an essential part of expert practice; a mix of theory and practice (Lum, 2017) gained from books, experience, and personal application of learning within the professional context. Application of knowledge, rather than knowledge itself, influences the development of professional expertise (Edwards, 1998; Hattie, 2003; King et al., 2014), and this is reflected in the conductors' perceptions. Expertise is associated with an increased personal confidence and desire to know more, whilst application of knowledge is construed as a 'social skill', perceived by some conductors to be more significant to the development of expertise than intelligence alone. Knowledge of the individual, at a personal level, supports the development of a trusting relationship, perceived to be a necessary component of expertise.

In contrast, a lack of knowledge, construed as 'bossing around', 'unwillingness to learn' and 'arrogance', has

negative impact upon all relationships and is perceived to impact professional development itself. As such, personal relationships appear to influence professional development with impact upon the learner and the team.

The synthesis of findings highlights the impact of experience upon the conductor's ability to perceive expert practice as holistic in nature. This is best reflected in the journey from novice to expert, a process influenced by experience, but not wholly dependent upon it (Dall'Alba & Sandberg, 2006; Eraut, 1994). Awareness of, and ability to position themselves within the larger context are perceived to be 'expert' behaviours (Benner, 1984; Dreyfus & Dreyfus 1986; Dreyfus, 2011). Some conductors are able to reflect these perceptions (Benner, 1984; Dreyfus & Dreyfus, 1986) in that they perceive the whole, and are also able to position themselves within it. These conductors' perceptions create an understanding of expertise as holistic, visionary (Institute of Conservation, 2019) and strategic in nature. They are able to recognise and respond to the needs of those around them, and in the process develop professionally. As such, it is possible to refer to the individual conductors' perceptions of expertise as reflective of their professional journey of development, and of their ability and desire to both look for

and respond to the needs of the individual and the organisation.

Alternatively, there are others, for example those with less professional experience or conductors with experience, but who are perhaps 'stuck' at a level of competence, lack the motivation, desire, or opportunity to develop further. These conductors are able to articulate their perception of expertise as holistic, however they perceive themselves are separate from the whole.

8.2.2. Experience as Essential:

The knowledge base of the expert is likely to be similar to that of the experienced (Hattie, 2003), but greater than that of the novice (Unsworth, 2001). Rather it is experience and the expert's ability to use that experience that is perceived to influence cognitive change (Wainwright, Shepard, Harman & Stephens, 2011). The development of expertise therefore relates to the ways in which experience is construed (Borell, Espwall, Pryce & Brenner, 2003) and utilised as a social learning opportunity of engagement and problem solving (Valkeavaara, 1999). This includes personal motivations and belief systems (Woods, 1999). The conductors perceive these factors to influence their ability to communicate knowledge

and skills holistically. The conductors perceive that they have a personal requirement to search out opportunities for learning, and their perceptions reflect awareness that both internal motivation and cognitive strengths are essential for expertise to develop (Brody & Hadar, 2015; Eraut, 1995, 2005, 2007). Conductors perceive that a personal desire for lifelong learning is a trait of the expert that impacts, and is impacted by, both personal and professional experiences. This applies equally to the acquisition of knowledge as it does to its application in practice, and is articulated in the constructs as 'willingness and knowledge' and 'willingness to teach and learn'. In contrast, a lack of professional responsibility and 'caring for professional development' is perceived to restrict progression. Associated with willingness is the ability to 'listen', 'observe' and 'respond' to the individual's 'need', expressed in their use of 'non-verbal communication'. In contrast, an inability to respond to the individual reflects a 'closed', 'self-centred' approach in which the 'sensory cues' are ignored. These findings expand comprehension of expertise as mastery of the skill (Benner, 1984), to include the context and the conductor's ability to respond to it in a holistic manner.

Decision-making, perceived to be a component part of expert practice (Wainwright, Shepard, Harman & Stephens, 2011), is absent from conductors' perceptions of expertise. Rather there is a focus upon teaching, learning and being a transformative force within other people's lives. Reflecting upon the strengths-based, solution-focused approach of CE, rather than a deficit, problem-solving approach (Gray, 2011), there is a focus upon experiential learning, to directly impact practice. With this in mind, conductors associate a 'wide range' of experience with expertise. Experience enables the conductors to 'understand their role', and to 'use' their experience to make an impact. In contrast, the non-expert not only 'lacks experience' but has a 'poor environment' in which to learn. In this way conductors perceive that it is not experience itself that influences expertise, but the nature of that experience and the conductor's ability to use it, that impacts development (Valkeavaara, 1999).

Experience creates opportunity for tacit learning (Eraut 2007), and is considered an essential requirement for expertise to develop (Patel, Glaser & Arocha, 2000). The working environment, which includes the atmosphere within the professional team, along with the presence of role models, is perceived to influence the conductor's professional

development. Work-based experience provides opportunity for learning to occur implicitly from others (Eraut, 2011; Burgess, Oates & Gouston, 2015), as the individual interacts with the environment (Fotheringham, 2013; Spence Laschinger, 1990). This demands both adaptability and inclusivity (Herbig, Bussing, Ewert, 2001) from all concerned. By creating the opportunity to learn within a social context, work-based learning plays a significant role in the development of the individual as a person (Eraut, 2007), and as such, has the potential to impact the development of expertise (Spence Laschinger, 1990; Valkeavaara, 1999) as a transformative process of development (Stocker, Burmester & Allen, 2014). Awareness of the impact of the social learning environment is evident in the conductor's constructs and perceptions. In particular this relates to their ability to work within the team, to communicate both verbally, and more significantly non-verbally, and to perceive the team as valuable.

The opportunity for challenge within the workplace is perceived to be a contributing factor in the development of expertise (Eraut, 2011; King, Jackson, Gallagher, Wainwright & Lindsay, 2009), and is reflected in the conductors' perceptions. There is an articulated need to create challenge,

and for the conductor to take a risk. This is articulated as confidence and bravery, and reflects the perception of Feuerstein (2008) that if belief in the individual is paramount, then a solution will be found.

As such, success is perceived by the conductors to relate to the knowledge that they have made a positive difference to people's lives, and that they can influence learning. In contrast, other conductors perceive that it is important for the expert to 'use the team' rather than develop their own strengths and to facilitate only that which is known to be successful. This is interpreted as not taking a risk. Expertise is perceived to be a combination of both personal and professional knowledge and 'know-how' (Hardy, Titchen, Manley & McCormack, 2006). The perceptions of the conductors extend this knowledge as they combine these features in a holistic manner, and include themselves within this process of development.

Whilst the theory in relation to the development of intuition is inconclusive (Kinchin & Cabot, 2010), intuition, as a combination of knowledge and experience (Effken, 2000), is considered a significant aspect of expert practice (Benner, 1984; Kinchin, Cabot &Hay, 2008; Kinchin & Cabot, 2010;

Lyneham, Parkinson & Denholm, 2009; Smith, Thurkettle & Dela Cruz, 2004). The conductors' perceptions highlight a connection between the personal and the professional (Altmann, 2007; Lyneham, Parkinson & Denholm, 2009) and reflect the "mystery" (Aydelotte, 1984, p. v) of expertise. Intuition is perceived by conductors as an ability to respond to the sensory and non-verbal cues, articulated as 'talent' and 'heart'. The conductors also perceive intuition to be associated with an ability to take risks, be open-minded, confident, and able to apply pedagogical skills within the interpersonal relationship. This is reflected in the constructs as 'interaction', 'communicate trust and belief', 'emotional attachment', 'ability to bring everything together', 'honest and convincing', 'social intelligence' and ability to 'self-reflect'. In contrast, the constructs 'isolation', 'physical', 'inconsistent', 'not listening', 'nothing of herself', define behaviours that block the development of intuition, and so expertise. These findings expand comprehension of expertise as mastery of the skill (Benner, 1984), to include the conductor's ability to respond in a holistic manner. The articulations of the conductors suggest that expertise is perceived to be associated with social interaction and development of self, as much as it is about acquisition of knowledge.

8.2.3. The Work-based Context:

Learning from others is perceived to take place implicitly within the workplace (Burgess, Oates & Gouston, 2015; Eraut, 2011). Organisations are perceived to create cultures which impact practice (Felstead, 2013), and so people in the same organisation are considered more likely to hold a similar underpinning construct system (Fotheringham, 2013; Walker & Winter, 2007) to those they work with, than with those in different organisations (Argote & Ingram, 2000). These perceptions are reflected in the conductors' articulation in which there is a focus upon the need to communicate, respond respectfully and avoid confrontation when possible. For some conductors working in the same organisation, the interpersonal relationships within the team are as significant as those with the learners in the group setting. Whilst there is recognition from these conductors that the individual conductor has to take responsibility for their own learning, there is also recognition that the environment has to support this learning. Ten conductors from a different CE centre however present a less united perception of expertise. In this centre expertise is perceived as competent, holistic, relational and aspirational. There is awareness of the team, and of the need to work together, however this is not the predominant perception. Rather expertise is associated with

application of theory, and of themselves as pedagogues. The perceptions of the remaining conductors from four other centres are more wide-ranging. Whilst the impact of the organisation upon learning is significant, at a personal level the presence of a role model is considered profound.

8.2.4. The Significance of Role Modelling:

Of the twenty conductors interviewed, only four can identify someone they perceive to be a role model. These perceptions reflect and extend those of others. If construing is a reflection of feelings and action (Butt, 2004) then conductors' perceptions of others' practice is significant in the development of expertise. The role model as promoter of the profession, and of professional behaviours (Cruess, Cruess & Steinert, 2008), has opportunity to influence the maintenance of standards and expectations as well as develop attitudinal and practice-based learning (Burgess, Oates & Goulston, 2016; King, Jackson, Gallagher, Wainwright & Lindsay, 2009; Wright & Carrese, 2002). As such, they are perceived to support comprehension of the whole, not just its parts (Lyon, 2015). The conductors perceive the role model as a positive influence upon their confidence, encouraging learning and exemplifying what is

possible. This is clearly demonstrated in their construing. All four conductors recognise the influence the role model has upon their own ability to communicate, and the impact this has upon their relationships within both the professional team, and group situations. For these conductors, non-verbal communication demonstrates the link between knowledge, skills, personality and belief. Described by one conductor as enabling 'magic', non-verbal skills are perceived to be an essential part of expert practice, especially within the group situation. Within the professional team however communication is perceived to be dependent upon excellent verbal skills. Reflection upon the impact of role models upon the development of practice is considered below (8.6.4. & 8.6.6.).

Personal construct theory (Kelly, 1963) creates opportunity to impact the future, by using experience to adapt (Dumchin, 2010). Application of this theory within this study creates opportunity to influence the future of CE within the UK. Conductors' perceptions of expertise are influenced by their experiences at both personal and interpersonal levels. Awareness of these influences creates opportunities to highlight those that positively impact development, in preference to those that do not. In this way, awareness of

the personal and environmental factors that impact the conductors' perceptions of expertise has potential to impact the development of expertise within the UK.

8.3. The Common Perceptions of Expertise

Expertise is perceived to be a dynamic interaction of knowledge, skills and beliefs (Elvira, Beauseart, Segers, Imants & Dankbaar, 2016); a combination of professional and personal knowledge (Fetzer, 2003) that requires personal adaptability and embodiment (Valkeavaara, 1999). The common priorities of the conductors reflect the range of perceptions articulated by the 20 conductors interviewed. These conductors perceive expert practice to be a holistic combination of belief, personality, knowledge and skill, and serve to confirm, and contextualise the perception that expert practice reflects the individuals' capacity for full engagement (Hanley, 2010). The conductors perceive both the detail and the bigger picture (King et al., 2007), whilst some are also able to position themselves within it, a factor associated with expertise (Dreyfus & Dreyfus, 1986). In this way, the conductors' perceptions of expertise are considered holistic in nature, larger than the "sum of its parts" (Haynes, 2009, p. 53).

8.3.1. Expertise as Holistic:

Awareness of expertise as holistic is reflected in the conductors' ability to link emotional, theoretical and practical experiences. Confidence influences the way in which challenges are approached, and opportunities for learning sought (Eraut, 2004a). This creates an understanding of learning as not only cognitive (Eraut, 2004b), but also emotional. Conductors articulate the need to create emotional rather than physical safety, and associate confidence with consistency of approach and behaviour.

Experience is not synonymous with expertise (Eraut, 2005), and this is reflected in the conductors' perceptions. Whilst some conductors very clearly articulate the emotional aspects of expertise (grids 2 & 9), this is not always underpinned by experience, and best demonstrated in the perceptions of the newly qualified conductor (grid 19). In contrast the conductor with more than 20 years' experience (grid 3) is able to reflect upon experience, but lacks the emotional connection with the individual. Her perceptions of expertise are considered functional and competent.

The conductors perceive confidence to impact commitment, communication, understanding, flexibility and bravery. They

perceive that the expert understands the parts, and can apply their knowledge to form the whole (Glaser, 1985). Holistic practice is perceived by conductors to impact their observation, their response to the individual and the group, as well as the larger professional, social and political picture. The synthesis of findings determines four aspects to expertise as holistic; belief, personality, knowledge and skills.

8.3.2. Belief as an Aspect of Expertise:

Conductors perceive that belief in CE enables the expert to apply their knowledge and skills with positive effect. Belief impacts their ability to facilitate the development of potential, without fear and limitation (McGrath & Davis, 1992). Conductors perceive themselves as significant in this process of change. In particular this relates to the way in which they perceive the individual as a learner, and facilitate development of their potential (Kamath & Ashok, 2015). This process of self-actualisation is considered a fundamental aspect of conductive practice, and referred to within CE as orthofunction, the basis of which is the development of a 'can do' attitude (Waiss & Borcsok, 2007), and resilience (Seligman, 2000). With this in mind the conductors'

perceptions of holistic practice highlight the need for openness and flexibility, an ability to look for, see, understand and respond to the person, and the situation as a whole.

Within psychotherapy, belief in the individual underpins the construction of a safe relationship from which potential can develop (Gray, 2011), whilst within midwifery, belief, as an intangible concept, is perceived to be an essential aspect of practice that enables the mother to believe in themselves (Murphy, Hughes & Sullivan, 2013). In this study, the conductors perceive belief to influence the generation and development of the relationship with the learner. This in turn impacts their ability to apply knowledge and skills. In contrast, lack of belief is perceived to generate mechanical practice, devoid of emotion, intuition or talent.

8.3.3. Application of Personality:

Pedagogical skill is greater than subject knowledge alone (Rosenszajn & Yarden, 2015). The conductors perceive personality to impact the relationship with the learner and with others in their team. They perceive personality to influence practice, and in particular to link personal and

professional beliefs, knowledge and skill. These perceptions support the findings of King et al. (2014), who determine that expertise is associated with an openness to learn from experience, and an ability to communicate knowledge to others. Expert communication skills are perceived to influence the conductors' ability to self-reflect upon the impact of actions, and so self-regulate behaviour. For this to occur, the expert is perceived to be 'open' to learning, and to others' thoughts and perceptions. In contrast, the least competent is described as closed to others' thoughts and ideas. They are perceived to lack the desire to learn, and appear disinterested in others' feelings.

8.3.4. Professional and Personal Knowledge:

Knowledge as generated by a process of social construction (Dorgo, 2009; Hutchinson, 1998), and personal interaction (Guterman & Rudes, 2008) is reflected in the conductors' constructs as 'linking theory and practice'. In contrast, the opposite is construed as 'mechanical'. Theory is articulated as both 'personal and professional', whilst theoretical comprehension is linked to an ability to 'deliver the principles of CE', based upon knowledge of that 'theory'. The conductors' perceptions of expertise represent a need to

know about CE, and more importantly, know how to share their knowledge so others can learn. Conductors perceive knowledge as differentiated in content and pedagogical application (Rosenszajn & Yarden, 2015). In this way they are able to apply what they know to fit the needs of the individual and the group.

Expertise is also associated with automatic activity (Dreyfus & Dreyfus, 1986; Kinchin & Cabot, 2010). Conscious processing and reflective practice are necessary for learning to continue in line with experience (Eraut, 1993). These factors are essential for both service users and the professional if they are not to be disadvantaged by this automated, subconscious behaviour (Haynes, 2009; King et al., 2008). In this way, conscious learning facilitates the conductors' moral obligation to service users. The conductors perceive the expert to be a lifelong learner. In particular there is an expressed need to take on new information, and to reflect upon the impact of their practice. This relates to their relationship with the learner and specifically to the impact and effectiveness of their communication style.

8.3.5. The Application of Professional Skills:

Perhaps because expertise is poorly defined (Jasper, 1994), with a focus upon knowledge (Germain & Ruiz, 2009), professional skills are frequently associated with ability to problem solve (Germain & Tejeda, 2012). In contrast within this study, three professional skills are perceived by the conductors to be associated with expert practice; observation, facilitation and communication. These three skills link and interlink to create a seamless application of belief, personality and knowledge. In this way professional skills reinforce the perception that expertise within CE is holistic in nature. Observation as a unique professional skill (Hári, 1968) enables comprehension of the individual and the group, of the detail and the bigger picture. Observation is perceived by the conductors to influence their relationship with the learner, as they facilitate learning. Facilitation is itself perceived to be a complex means by which conscious learning takes place (Hári & Ákos, 1988), whilst the role of facilitator is one of support and engagement (Coles & Zsargo, 1998).

The conductors' focus upon the relationship and its significance in enabling insight to the learner is not unique to CE (Hopwood, 2015; Unsworth, 2001), however the

conductors perceive expert communication to relate to both verbal and non-verbal skills. Whilst expert communication within the group can be perceived as 'magic', the conductors also perceive communication within the team to be equally important. Excellent communication skills are perceived by the conductors to reflect an ability to see the bigger picture and the detail within it. In the context of the conductors' perception that expertise is a combination of professional and personal knowledge and skill, awareness of the need to communicate with the whole team, and those associated with it, is significant.

8.4. Is it possible to Measure expertise?

Whilst measures of expertise are limited, they do exist (King et al., 2008), but without a clear definition of expertise it is difficult to construct a measure of expert practice (Germain & Tejeda, 2012). There exists no definition of expertise within CE, and the findings of this study do not generate a validated definition. It is however possible to create a common perception of expertise as the basis from which a self-reflective measurement tool is constructed. This study, unlike Germain & Ruiz, (2009) does not use perceived experts as participants. An opportunistic, rather than a purposive sample (Edwards, 1998) is considered to be a strength of

this study. Consequentially, conductors are supported to identify their strengths and the areas that they choose to develop. They can measure themselves against common perceptions, rather than the views of a few individuals, or be categorised as novice, experienced or expert.

The conductors' perceptions of expertise are thematically defined as holistic. Belief, at the centre of this holistic approach to practice, influences the application of personality, knowledge and skill. This perception of expertise finds parallels within a sporting context. The Pyramid Of Teaching Success in Sport (Gilbert, Nater, Siwik & Gallimore, 2010; Gilbert & Trudel, 2013), is underpinned by the emotional and interpersonal aspects of the expert role. The Pyramid as a tool serves to support reflective practice, professional confidence and motivation, and gives credence to the development of the self-reflective measurement tool constructed in this thesis.

The Values in Action (VIA) questionnaire (Peterson & Seligman, 2004) can be adapted to fit the professional context (McGovern, 2011). This supports the development of the self-reflective measurement tool generated in this study. Content validity, perceived to be essential in any measure

(Germain, 2006) is determined in this study, by an extensive and iterative process of theory generation (Charmaz, 2006). By utilising the bipolar data collected, a process of oscillation (Butt, 2004) develops between the grid and interview data. Items are cross-referenced against the strengths, and a process of member checking by conductors validates the trustworthiness of the data utilised (Mercer, 2007). This process of item selection aims to include questions that represent both the common themes and the individual conductor's perceptions of expertise. As a result a 92-item questionnaire is constructed (appendix 2.3.3) that represents expertise as a holistic combination of both common and individual perceptions. The tool construction is robust and utilises a Likert scoring system (Oza, 2017), however the lack of psychometric testing and item reduction limit the opportunity to quantifiably test the tool more extensively. Whilst the system undertaken in this study demonstrates validity, on reflection, a process in which objective and subjective characteristics are identified, such as that described by Germain and Tejeda (2012), may further increase the transparency of the process of item selection.

8.5. The Utility of the Measure of Expertise

With reference to the findings of this study, the tool has potential to facilitate progress as part of a larger awareness of the factors that influence expertise, such as the learning environment and the ability of those within it to communicate their knowledge and skills to those around them. In this way application of the self-reflective measurement tool may be possible to support Kelly's perception that "men can play active roles in the shaping of events" (Kelly, 1963, p. 19). Self-actualisation as a process in which free will and potential combine (Kamath & Ashok, 2015) to create the highest professionalism (Fetzer, 2003) sits well within a positive psychology, strengths-based approach (Niemiec, 2018) to professional development. Rather than categorise practitioners as novice, experienced or expert (King et al., 2008), the self-reflective measurement tool generated in this thesis, serves to encourage development towards a perceived best practice, the priorities of which are determined by the individual.

The strengths-based, self-reflective tool produced in this thesis has the potential to assist conductors measure a baseline, and reflect on change over time. Choice of a strengths-based approach, as a triangulated, mixed-

methods, pragmatic solution to the research question (Houghton, Hunter & Meskell, 2012), adds strength to the study. If expertise is a dynamic state that requires on-going development (Eraut, 1994) then the construction of the self-reflective measurement tool, with potential to measure self-perceived strengths, may assist in the development of these strengths over time (Fetzer, 2003; Hopwood, 2015; Trujill, 2009). As a means of raising the conductors' awareness of their strengths, it may then be possible to increase resilience in these characteristics (Padesky & Mooney, 2012). Whilst there is no guarantee that identification of strengths will increase their development (Govindji & Linley, 2007) simply by identifying them, the conductor may use them more. It is this that the tool has potential to develop. As part of an on-going process of development, this tool may assist the conductor in identifying and developing strengths with impact upon all aspects of their lives (Hefferon & Boniwell, 2011). In this way the tool has potential to influence practice in a holistic manner.

The aim of this study is to create opportunity for conductors to perceive lifelong learning as both possible and relevant. Whilst there is no reason to believe that only a few conductors can achieve expert status (Dall'Alba & Sandberg,

2006; Scott & Dinham, 2008), awareness of the ways in which conductors gain and utilise information (Edwards, 1998) creates opportunity to believe that all conductors have the potential to learn to become expert (Germain & Ruiz, 2009). Application of the self-reflective measurement tool creates potential to assist all conductors to develop further.

8.6. Strengths and Limitations of the Study:

8.6.1. The Impact of Grid Structure upon Findings:

Set within a constructivist paradigm, Repertory Grid Technique as the method of choice is appropriate as a tool to determine perceptions (Borell, Espwall, Pryce & Benner, 2003) of expertise. The grid, composed of stated elements and elicited constructs, facilitates the acquisition of both quantitative and qualitative data (Darawsheh, 2014).

Aspects of the grid structure however are perceived to impact the findings of this study. Implicit within the grid's construction is the range of convenience (Fransella, Bell & Bannister, 2004), or the context of meaning, generated by the elements within which the constructs exist. In order to generate constructs that give meaning and insight to conductors' perceptions of expertise, the choice of elements themselves influences construct generation. The need to

perceive ourselves in the context of others' perceptions justifies the inclusion of 'self' as an element (Clayson, 2013; Walker & Winter, 2007). In the pilot study I include 'ideal self', 'actual self' and 'self' as elements. This creates too great a heterogeneity and is confusing for participants. Following the pilot study I make changes to the elements in order to increase their homogeneity (Easterby-Smith, 1980; Wright & Lam, 2002) and relevance to the context (Yorke, 1978). For example I change 'ideal interaction with' to 'most expert communicator'. This improves comprehension, however I also mix roles (leader and facilitator) with professional skills (communication and pedagogue). Whilst I perceive the elements to be relevant to the conductors' day-to-day reality (van Kan, Ponte & Verloop, 2010), 'communication' is later considered a construct, rather than an element (Kelly, 1963). Consequently different levels of abstraction are generated (Yorke, 1978). This makes it harder for the conductors to identify similarities and differences amongst the elements, and is perceived to have the greatest impact upon the data generated from the interviews. This is evidenced in the constructs, for example, 'present in the moment', 'empathetic', 'get the best out of people' and 'know the goals' are constructs that demonstrate a mix of individual characteristics with professional aims,

rather than specific skills or knowledge. The mix of roles and skills may also have had an impact on the conductors' scoring of the elements against the constructs, and so upon the cognitive complexity, or the "percentage of variance associated with the first factor" (Bell, 2006, p. 273). In one grid, no component is determined, whilst in all the others only one component is identified. This reflects a minimal level of cognitive complexity, generated as a consequence of the grid structure (Bell, 2004). The addition of individual names rather than element roles may increase heterogeneity of findings (Wright & Lam, 2002), however element roles are perceived to increase the cognitive complexity of the data (Haritos, Gindidis, Doan, Bell, 2004). As such, it appears that it is the mixing of the skills and roles that may have had the greatest impact on cognitive complexity, and so upon the data generated from the interviews themselves.

Another factor may have also played a role in the findings. This relates to the manner in which the constructs are elicited. Bipolar construct pairs can be elicited in a number of ways. I chose the triad opposite, rather than the triad difference method because of the likelihood of increased differentiation of constructs (Epting, Suchman & Nickeson, 1971). Whilst there are some construct pairs that are less

differentiated, for example 'observant-unobservant', there are also instances where specificity is constructive and creates useful insights into conductors' perceptions. For example, 'present in the moment-poor listener'. I perceive this to be a strength of the study. Whilst the elements may generate differentiated abstractions, the constructs generated are themselves more likely to be 'straight', and representative of the range of convenience (Yorke, 1978). In this case it is the range of convenience that may have created the largest impact on the findings.

8.6.2. Ethical Considerations:

In the final phase of the study, I liaise with the centre managers for assistance in the development of the questionnaire. Whilst I reinforce that the completed forms will remain anonymous and confidential, I do not factor in the role of the gatekeeper in distributing and collecting these forms. Like Darra (2008) whose qualitative study focuses upon perceptions, I had not anticipated that conductors may feel vulnerable in their participation. Unlike Mercer (2007), however, I do not articulate to the conductors that I will not relay findings from the questionnaires to management. I do not consider this further, until I receive feedback from one centre that suggests participation might have been reduced

because I involved the gatekeeper in the submission and collection of the data, rather than direct communication with myself. I receive far fewer feedback forms than anticipated and gain far less participation from conductors than in previous phases. Whilst I attempt to address the impact of this by extending a member-checking process, this impacts the findings as representative of conductors working in the UK. Had I ensured that individualised questionnaires were returned to me directly, this situation may not have evolved. Whilst this impacts the study, it also highlights the need to further consider confidentiality and anonymity within the context of the insider-researcher role (Sutcliffe, Linfield & Geldart, 2012).

8.6.3 Structure of the Self-reflection Questionnaire:

The format of the self-reflection questionnaire is perceived by conductors to be representative and appropriate to their working contexts. The structure of the questionnaire however needs to be reconsidered, as it is not possible to fully determine the tool's validity. Firstly, the wording of the questions, whilst utilising the bipolar data, does not fully identify strengths. If the tool is to comprehensively assist conductors to prioritise their personal strengths and potential

(Seligman & Csikszentmihalyi, 2000), all questions must be stated in a positive, affirmative manner (Hefferon & Boniwell, 2011; Nathawat & Tripathi, 2018; Oza, 2017), and so clearly outline strengths, rather than weakness. For example 'I am too uncertain of my belief to be able to inspire others' could be reworded as 'my belief inspires others'. Rewording of the questions will also impact the scoring system. All questions can then be positively scored. Secondly, the process of scoring (1= most like me, 5 = least like me) needs to be altered. At present, the strengths are represented by a low score on positively stated questions, and a high score on negatively stated questions. For example 'I find it hard to make eye contact' scores 5 as very unlike me, whilst 'I easily adapt to the needs of the individual' scores 1. This complicates scoring and conflicts with the logic of a strengths-based approach. Thirdly, the process of calculating the strengths is cumbersome and lengthy. Correction of the above two points should resolve this.

8.6.4 Learning from my position as insider-researcher:

My aim for this study is to consider the ways in which conductors perceive expertise. As an insider-researcher with impact on this constructivist study, and the knowledge

generated from it (Probst, 2015; Rose & Webb, 1998), I can reasonably be expected to hold my own thoughts on what expert practice is. My aim is to combine intuition and cognition, the personal and the impersonal (Holmes, 2010; Davies, 2012), the qualitative, quantitative, subjective and objective. In support of this I use RGT as a method to reduce the impact of researcher bias (Mayo, 2008) and support my objectivity. I undertake a reflexive stance, in order to increase the quality and rigour of the study (Darawsheh, 2014). I record the impact of my perceptions at points throughout the study, and include conductors as part of a member-checking process. This study is heavily influenced by qualitative analysis, which impacts all stages of development. This includes item selection for the self-reflective measurement tool. Whilst I aim to stay true to the data itself (Jankowicz, 2004), I am also aware that I am interpreting it (Lyon, Hoover, Guisti, Booth, Mahdavi, 2016) as I develop my knowledge of the constructs and the meanings associated with them (Charmaz, 2017). Positively I feel that I gain greater understanding of the conductors' perceptions of expertise and of the factors that influence them.

The research process and its culmination in the generation of the strengths-based self-reflective tool have changed how I aim to communicate, give feedback and support learning in others. As Clayson (2013) reflects that a constructivist approach impacts his ability to listen and communicate with others, I also perceive that learning from this constructivist process of meaning making has had an impact on me. At the conclusion of this study not only do I perceive expertise as holistic, I believe completion of this research serves to validate the need to personify professional characteristics perceived by conductors to be strengths. In particular this relates to the ability to communicate effectively, and to recognise and value the impact of emotion within the relationship, and therefore within the role of conductor.

Awareness of the impact role modelling can have upon attitudes and behaviours within the individual and the work-based learning environment (Felstead, 2013; Wright & Carrese, 2002) is higher in my reflections and personal priorities. The self-reflective measurement tool, which became the motivation for this study, is now positioned within a larger context, that of increasing engagement between employee and employer. In this way, awareness of expertise goes beyond the idiographic to the nomothetic, and

serves to impact my current professional role in both undergraduate and postgraduate conductor training.

8.6.5. Ideas for Future Research

1. There may be common perceptions of expertise, however a definition remains elusive (Germain, 2006). Given the various contexts and challenges faced by conductors working in the UK further exploration and definition of expertise (Gordon, 2000) within CE is worthy of consideration. To expand comprehension of expertise further, it may be worth exploring expertise from a wider range of sources, for example service users and peers (King et al., 2008). In terms of utility, it may also help the profession more to construct a benchmark of expert practice (Fox-Young, 1994). Whilst the tool serves as a means towards this end, in itself it is not sufficient. As Edwards (1998) concludes with an expressed need to both define and value expertise, so too this study is a first step towards a more explicit definition of expertise within CE, from which further exploration can progress.

2. Conductors' perceptions of knowledge are focused primarily upon CE, the individual and of the immediate,

service-user context. Whilst this is appropriate, it raises awareness of the need for conductors to expand their theoretical knowledge further. Van der Aa, van den Broeke, Stronks, Busschers and Plochg, (2016) identify not only holistic perceptions of expertise, but also an awareness of the need to adapt to the complexity of individual need within the wider societal context. It is relevant to consider the need for managerial, political and social knowledge beyond the immediate group context.

3. With the self-reflective development tool in mind, it is relevant to consider that within different contexts, perceptions of expertise may differ (Germain & Tejeda, 2012). With a focus upon character strengths, rather than professional skills, the tool has the potential to be applicable across contexts. Further exploration and utilisation of the tool, longitudinally, and contextually is an area for further consideration, development and research.

4. Regardless of length of professional experience, conductors perceive themselves closer to the expert than the least competent. This raises some concerns

regarding conductors' capacity to reflect upon their own level of ability or requirement to develop. If lifelong learning is a necessary aspect of 21st century living (Gould, 2000), and if this study is to support the generic development of expertise (Scott & Dinham, 2008), then further development of the self-reflective measurement tool has relevance to practice. Use of the strengths-based tool has potential to link the philosophy of CE to the development of expertise within the profession. Conductors understand the philosophical underpinnings in relation to service users, however application of this to conductors themselves appears limited in places. Within a youth setting Barraza and Bartgis (2016) found application of a strengths-based tool created opportunity to change the way in which individuals perceived themselves and increased confidence and belief in their ability to find solutions. Further exploration of the strengths-based tool as a means to develop confidence and self-awareness is therefore worthy of consideration.

8.6.6. Implications for Practice, and the Profession

1. Perceptions of expertise set a baseline for further research and have the potential to impact training at both undergraduate and postgraduate levels. Conductors can gain experience and become competent and proficient. They can however become stuck at these levels (Kinchin & Cabot, 2010). Further exploration of the factors that assist in the transition from experienced to expert is therefore worthy of consideration. As an under-researched area (Bereiter & Scardamalia, 1993), exploration of the factors that assist professionals, in this case conductors, progress from novice towards expert, may further positively impact training and professional development (King et al., 2008).

2. This study is based upon the perceptions of conductors working in the UK, regardless of the specific professional context. In reality, however, context plays a role in the development of expertise (Wilson & Retsas, 1997), and as such further exploration of the impact of specific experiences upon perceptions of expertise has relevance. Furthermore, now that expertise and perceptions of it are articulated, it is possible to use these findings as a baseline for further exploration of expertise and its impact upon practice. Further research may then develop

comprehension of professional strengths and relate them to outcome measures (Ratliffe & Sanekane, 2009), another area poorly researched area (King, et al., 2014).

3. Raising awareness of the need for role models may help conductors identify a significant other, to assist and nurture the development of professional and personal knowledge (Felstead, 2013; Cruess, Cruess & Steinert, 2008). In this way it may be possible to support the development from novice to expert (Gilbert & Womack, 2012). Within a nursing context, the critical companion (Wright & Titchen, 2013) supports the development of both personal and professional knowledge as perceived barriers to the development of expertise are reduced and person-centred practice develops. Feedback within the workplace creates potential for learning to be both appropriately challenging and socially interactive (Eraut, 2011). The process of mentoring is perceived to benefit not only the 'learner', but also the 'expert', as the need to both support and challenge becomes an essential part of the dynamic (Wright & Titchen, 2013). Given the realities for conductors working alone, or in isolation, the reality of mentoring in this way may be challenging. This recommendation is given as a benchmark for best

practice, and an aspirational goal for larger organisations. Discussion as a socially constructed narrative tool may support learning at both individual and nomothetic levels (Lainema, 2009). The PCA (2019) now has regional meetings, and so the logistics of developing a supportive network may be assisted by this progression of the Professional Body.

4. If conductors are to have a role model, there also needs to be support to become one. This demands further exploration of expertise and the impact of role modelling upon its development. The expert role model is perceived to possess similar characteristics to that of the expert conductor; characteristics such as excellent interpersonal skills and a desire for professionalism (Wright & Carrese, 2002). By increasing awareness of the need for role modelling, and providing training to become one (Gilbert & Womack, 2012), it may be possible to benefit the learner, the role model and the organisation itself (Cruess, Creuss & Steinert, 2008). In my present role within training, there is opportunity to develop this awareness. Activity in this way serves to recognise the need for excellence, and in particular the need to reward and acknowledge excellence (Hattie, 2003).

5. If belief impacts practice (Donaghue, 2003), then further exploratory work to gain insight into conductors' beliefs is worthy of consideration. In terms of determining factors that may influence the development of expertise, with awareness that it is not uncommon for a discrepancy to exist between what teachers say they believe and how they practice (Phipps & Borg, 2008), exploration of belief as a limiting factor may be one means of improving practice. This has impact at both individual and organisational levels. If belief systems also develop in part from experience (Donaghue, 2003), then the nature of that experience is a consideration for both teaching organisations and employers. Tacit knowledge, as practice-based learning, reflects the culture of the organisation and the interpersonal relations that exist within it (Collins & Evans, 2009). As such, the ethos of the workplace has potential to influence the development of expertise and is worthy of further consideration.

6. The means by which conductors are supported to perceive expertise as holistic in nature is significant, however conductors also need to be aware that expertise does not just happen by osmosis. Rather, that expertise requires the desire and the opportunity to continue to develop and

learn (Bereiter & Scardamalia, 1993). Those involved in conductor training need to teach the 'whole', not just the abstracted parts of the whole, and importantly to teach conductors how to use experience to develop expertise.

8.7. Concluding Statement:

Application of Kelly's personal construct theory (1963) in the form of the repertory grid technique makes the conductors' tacit perceptions of expertise explicit. This mixed methods approach facilitates comprehension of common themes held within these individual perceptions. The perceptions of the conductors reflect awareness of expertise as a process of engagement, in which the expert is perceived to be a part of the situation in which they exist (Dreyfus & Dreyfus, 1986; Lyon, 2015). The findings of this study may assist conductors position themselves more clearly within their professional context, and set goals with relevance at both idiographic and nomothetic levels.

Expertise may be evaluated by experience, reputation and ability to problem-solve (Ericsson, 2008). The perceptions of the conductors involved in this study demonstrate an understanding of expertise as holistic in nature, underpinned by belief, with impact upon personality, knowledge and skill.

Expertise in CE contains features identified in other person-centred professions such as the centrality of the interpersonal relationship (Benner, 2005), the influence of the relationship upon the practitioner's ability to link theory to practice (Westera, Kebbell, Milne & Green, 2014) and to gain a perspective on the 'bigger picture' (Baumann, 2006). What is unique in this study however is the centrality of conductors' belief in CE, and the impact of this belief upon these interpersonal relationships. Expertise is perceived by the conductors to be evidenced by the ways in which the personal and the professional combine. This relates particularly to the way in which their belief is lived out in everyday practice, and demonstrated by their ability to communicate with others. Awareness of CE as a "unitary whole" (Hári & Ákos, 1988, p. 214) is expanded. Comprehension of expertise goes beyond practice, to include the professional team, the wider organisation and relevant social contexts.

The aims of this study, to identify the ways in which conductors construct their perceptions of expertise, define the commonalities amongst these perceptions and apply the findings in the construction of a measurement tool to assist in the development of expertise, are achieved. As such,

expertise is perceived to be a holistic combination of belief, personality, knowledge and skill. These themes, in the context of the VIA questionnaire (Peterson & Seligman, 2004), influence the development of the strengths-based self-reflective measurement tool. This tool, has the potential to enable conductors to identify professional and personal strengths, however further work is required to develop the tool into a format that makes it more comprehensible and suitable as an aid for professional development.

This study, whilst based upon the perceptions of 20 conductors working in the UK, cannot be said to represent all conductors working in the UK. The presence of common themes, and inclusion of member checking within the study, however, indicates that these findings are relatable and reflect the perceptions of the circa 100 registered conductors working within the UK.

In contrast to King et al. (2008) the perceptions of the conductors are synthesised without reference to professional experience, peer perspectives, or recognised qualification. Further exploration of the impact of experience upon professional development and perceptions of expertise is relevant and worthy. In particular, the findings of this study

have potential to influence training at both undergraduate and postgraduate levels, and raise expectations towards the development of expert practice. Unlike the study by Bairstow, Cochrane and Hur (1993), conductors are involved in this exploration of perceptions of expertise. This has potential to strengthen conductors' confidence in their knowledge of what they perceive to be expert practice. Conductors' perceptions of expertise as holistic, challenge the views of McKinlay (1990), in which conductive practice is perceived to be neither expert, nor robust. Rather the perceptions of the 20 conductors who participated in this study serve to support Sutton's (2001) desire for a definition of conduction as a means by which to gain identity.

> To be truly ourselves we have to define conduction, in clear, material terms, and when we have done so we shall have no choice, indeed we shall have the duty to say what it is not (Sutton, 2001, p. 40).

At a personal level, as an insider-researcher, I have taken a reflexive position within the study. I have recognised the impact of my presence at times throughout the study, and used my insider knowledge to connect and question the findings (Charmaz, 2017). Whilst it cannot be said that I fully

represent the perceptions of the conductors interviewed (Pillow, 2003), I can demonstrate by my thoughts and actions that I have absorbed the analysis of their perceptions into my own practice (Holmes, 2010). Consequentially, I have extended my perception of expertise, and reflected upon the need to comprehensively combine the personal with the professional, the group with the team, the detail and the bigger picture.

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